

SAWA Gas Retail Market Systems

Interface Control Document (ICD)

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1 INTRODUCTION

The Gas Retail Market System (GRMS) will support the Retail Market Procedures [RMP] for South Australia and Western Australia and facilitate the operation of two contestable retail gas markets in these states. The operation of these markets will require two way electronic communications between the GRMS and each of the market participants. This document will define the required format and the data that will be valid for such communication.

1.1 Purpose

This document describes in detail the data items required to be transferred between the external interfaces of the Gas Retail Market System (GRMS) and the market participants of South Australia and Western Australia to support the Gas Retail Market Procedures [RMP].

The purpose of this description is to provide sufficient detail to all market participants in the two state Market to enable them to develop software systems to support their operations in the two markets. Similarly this document will be used as input to the enhancements of the GRMS.

This document will also describe the mapping of these data items to the latest aseXML compliant schema where possible. Where a suitable mapping to the aseXML schema cannot be found suggested changes to the aseXML schema will be described. These changes will form the basis of change requests to be submitted to the aseXML working group.

For South Australia, this document is the resultant output from a number of changes to the GRMS as a result of the introduction of the Short Term Trading Market [STTM]. These changes to the GRMS were developed by AEMO and market participants via consultation with the Gas Retail Consultative Forum [GRCF].

For Western Australia, this document is the resultant output of discussions between AEMO and Market participants and minimal changes have been made to the definitive Business Specification [BS] and Interface Control Document [ICD] in respect of the operation of the GRMS in Western Australia.

While the document was designed to be read with the Business Specification, the document structure has been altered to assist the participants with a range of preferences leaning towards existing participant documentation. The document is structured in major functional groups (e.g. Registry, Meter Reading etc) and then functional subgroups (e.g. Transfers, New Connections etc).

Below the functional subgroup level the document aims to structure itself around the physical transactions and then to the logical process flows, as described in the BS, that use the physical transactions. Some physical transactions are repeated to retain the context of the functional grouping and subgrouping.

This document will be agreed with AEMO after consultation with the market participants in both South Australia and Western Australia.

1.2 Scope

This Interface Control Document (ICD) does not document any flow of data which does not include the GRMS as either a sender or a recipient of such a data flow.

In its definitive state this document will be split into three broad, but distinct areas;

1. logical descriptions of a data flow providing at a logical level the data required to support specific business transactions and the relationships between data items within those data flows
2. physical definitions of the data flow describing the physical format of external data flows based on A Standard for Australian Energy Transactions [aseXML]
3. a description of the csv transportation details that participants will need to use in order to physically communicate with the GRMS. The ebXML / aseXML transport is outside the scope of this document.

1.3 Change control

Initially this document was updated as the direct result of the discussions carried out with AEMO and market participants in a number of workshops. After each workshop, as issues were identified and addressed any required document changes were made and this document was re-issued in its entirety.

At the end of the workshops when all outstanding issues have been resolved and the document has been formally agreed this ICD will be re-issued and made *definitive*. At this point, any additional changes required to the content of this document will follow the CGI change management process.

Where system changes are not dictated by Procedure changes (and hence covered by a Contract Change Request), change requests against the ICD are to be raised through AEMO.

1.4 Summary

This document describes the External interfaces involving the Gas Retail Market System (GRMS) in the Gas Retail Markets of South Australia and Western Australia

1.5 Amendment History

Date	Issue	Change summary	Inits.
14/08/2003	0.01	Document template creation.	MGB

20/08/2003	0.02	Addition of Logical Flows and Data Items – second pass.	MGB
22/08/2003	0.03	Baseline for parallel updates.	MGB
27/08/2003	0.04	Baseline for internal review	MGB
28/08/2003	0.05	Added updates from RMRWG	JB
28/08/2003	0.06	Incorporated notices and electronic file headings and logical flows. Incorporate new flows identified in RMRWG No.18. Incorporate BAR flows and Data Items.	MGB
29/08/2003	0.07	Baselined for initial participant review.	MGB
30/08/2003	0.08	Error correction and re-work.	MGB
08/09/2003	0.09	Synchronised with the [BS] Added short names. Clarified receipt id will not be used in ACK. Allocated CATS transactions to transfer (as per Origin and Envestra comments)	MGBT B/ MV
09/09/2003	0.10	Added in data items for prospective aseXML transactions	MGB
16/09/2003	0.11	Incorporated aseXML transaction details and mappings.	MGB
17/09/2003	0.12	Review and updates, added section detail on transport interfaces.	MGB/ KQ/ TB/ MV/
17/09/2003	0.13	Merged in CSV Data Dictionary	MGB
17/09/2003	0.14	Incorporate final review comments and tidy up.	MGB
17/09/2003	0.15	Final Draft Issued for Approval	MGB
19/09/2003	1.0	Issued Definitive, Subject to REMCo Approval	MGB
02/10/2003	1.1	Issued definitive following incorporation of additional comments	MGB
02/10/2003	1.2	Fixed some minor typos in preparation for next issue. Re-formatting of transactions to be physical -> logical (as per participant request) Addition of review comments.	IPH MGB
12/11/2003	1.5	Final Draft Issued for Approval	MGB
21/11/2003	1.7	Issued Definitive, Subject to REMCo Approval	IPH
26/11/2003	2.0	Made Definitive.	MGB
16/12/2003	2.1	Changes Made under the following change request: CR: Logical12:	MGB

		<p>Section 8.1.10.1: Deleted CancellationReasonCode and Description.</p> <p>Section 8.2.3.1 and 8.3.3.2; Removed effective from dates and made some corrections to schema elements used to carry BaseLoad and Heating Rate</p>	
28/01/2004	2.1	<p>Changes Made under the following change request:</p> <p>CR: Logica08: Section 8.8.1 and Section 8.8.2; added two notices as per RMR Added Sections 8.8.26 and 8.8.27 for these notices.</p> <p>CR: Logica11: Section 8.1.3.2.3 and 8.1.3.3; added note regarding event codes. Section 8.8.12 and 8.8.17; added additional data items.</p> <p>CR: Logica13: Section 8.2.3.1 and Section 8.3.3.1; corrected field used to transport BaseLoad. Section A3: synchronised datatypes definitions of BASE_LOAD, HEATING_RATE and TEMP_SENSITIVE_HEATING_RATE with aseXML types. Section 8.4.4.1; Redefined the use of Last_Read_Date. Updated section that lists event codes to note the value of the Event “severity”.</p> <p>CR: Logica15: Section 8.9.1; Correction to element path. Section 8.1.8.1; Redefined mandatory optionality of participant element. Section 8.1.7.1; Modified participant definition. Section 8.8.6; Added gas zone.</p> <p>CR: Logica18: Section 8.1.6.1 Fixed Typo Section 8.1.9.1, 8.1.8.1 moved ECNET-WOB-NOTF-OP and ECNET-WOB-NOTF-PU references. Section 8.1.10.1; participant definition made consistent for both ECNET and TFR.</p> <p>CR: Logica20: Section 8.7.4.3 Added DATA_GENERATION_DATE to PROV-HSD.</p> <p>CR: Logica17: Added Sections 3.2.5.3 and 3.4.2.6 for message level event codes and added details to Appendix B</p> <p>No CR:</p>	MGB

		Added example transactions to 8.2.3.2.1	
28/01/2004	2.1	<p>Changes Made under the following change request:</p> <p>CR: Logica14:</p> <ul style="list-style-type: none"> i). Provide pipeline Id in the USS swing gas flow: ii). Change name of the CP-TANUSA flow to MCP-TANUSA for consistence: iii). Removed the SUBS-NOTF flow. iv). Pipeline identification added to UDW flow: v). User identification added to the OMP-USR: v). Swing Service provider identification added to the OMP-SSP flow: vi). Swing Service provider identification added to the BID-SSP flow: vii). The notification of invalid bid book flow removed: viii). The Response to the interval meter reading removed: <p>CR: Logica19:</p> <ul style="list-style-type: none"> (3) (1) Surplus Instruction Flow New Flow. Flow Name: SURPLUS Flow Attributes: <ul style="list-style-type: none"> - PipelineId - SubnetworkId - GasDay - Swing Type (Loan or Park) - Allocation Percentage - Price (per GJ) (2) User Profile Forecast Flow - PipelineID deleted from the flow definition. (3) Interval meter reading Flow - CheckSum field added to the flow definition. (4) HDD Flow HDD_ZONE deleted from the flow definition. (5) NORM-NSL Flow HISTORICAL_DAY field added to the flow. <p>CR: Logica23:</p> <ul style="list-style-type: none"> (1) Add TBWRA into the TRA flow (message). (2) Add ENERGY_INFLOW_01 ...24 into the CSV dictionary (3) Change the PARTICIPANT_ID to PARTICIPANT_GBO_ID in 10.9.4.2 (4) Change the USER_ID to USER_GBO_ID in 10.2.2.2, 10.9.7.2, 10.9.8.2, 10.10.3.2, 10.10.4.2, 10.10.13.2 (5) Add HISTORICAL_DAY to the CSV dictionary 	MV

		<p>(6) Rename CP-TANUSA to MCP-TANUSA</p> <hr/> <p>(7) Change mask for effective date in the appendix one from yyyy-mmdd to yyyy-mm-dd.</p> <p>CR: Logica24: Added appendix A.5 and A.6 with coding of SUB_NETWORK_ID and PIPELINE_ID and appropriately fixed all affected examples for the section 9 and 10.</p>	
05/02/2004	2.1	<p>Updates for CR28.</p> <p>(1) Examples for the Interval Meter reading Flow</p> <p>The example for this flow currently shows the format being used after end of a gas day. An example for during gas day format could be added.</p> <p>(2) Move GPENG flow from 10.7.1 to the section 9 – meter reading</p> <p>Gate Point Energy inflow is not used only in WA but in both jurisdictions. It also represents gate point energy inflow and therefore should be a part of the meter reading section.</p> <p>(3) Users pipeline nomination UPNA – 10.5.1 should be on pipeline level rather than shipper</p> <p>The shipper GBO id should be removed and Pipeline_ID field should be in the flow instead.</p> <p>(4) Users allocation instruction – UAI - 10.3.1 example is incorrect</p> <p>The ALLOCATION_TYPE field has incorrect values in example (PERCENT,QUANTITY). This has to be corrected to use ‘P,Q’.</p> <p>(5) Users allocation instruction – Used shipper register– NOT-UAI-USR - 10.3.3 add ALLOCATION_TYPE field</p>	MV
05/02/2004	2.1	<p>Updates made under direction of REMCo (awaiting CR)</p> <p>Updates to transaction mapping in section 10.1</p> <p>Update to HDD 10.6.8</p> <p>Update into MCP-TSS in section 10.10.8</p> <p>Update into MCP-TANUSA in section 10.10.9</p>	MV
19/02/2004	2.8	Change to the Gate Point Metering Data (MV)	MV
19/02/2004	2.8	Included ECNET-PEND-NOTF for CCN5 CR05 v part 1.	JB

2/3/2004	2.8	Changed sections 10.5 onwards. Primarily changing the structure of the CSV reports header and csv line.	
16/3/2004	2.8	Included CATSChangeAlert transactions – sections 8.1.1, 8.1.2 & 8.1.15, and Appendix B. [CCN11]	JB
16/3/2004	2.8	Included changes to CATSObjectionResponse and CATSChangeResponse for Logica CR37.	JB
16/3/04	2.8	Included changes to definition of ‘small use customer’ in section 8.2.3.1. [CCN11]	JB
16/3/04	2.8	Included new transaction WDR-HSD in section 8.8.1, 8.8.2 & 8.8.27. [CCN11].	JB
16/3/04	2.8	Changed transaction GBO-STATUS-INACTIVE to GBO-STATUS-CHNG in sections 8.8.1, 8.8.2 & 8.8.21. [CCN11]	JB
16/3/04	2.8	Modified BS references in section 8.8.2.	JB
16/3/04	2.8	Included new event codes in Appendix B and section 8.1.14 for changes to Objection Withdrawal validation. [CCN11]	JB
17/3/04	2.8	Included new (internal) cancellation reason code CRC000 for ROLR event in Appendix C.	JB
17/03/2004	2.8	Issue from V2.1 Add in the required aseXML examples. CR: Logica36 Removed sections entitled “AseXML Schema Compliance (R12)” REMCo CR07: Added clarification to section 3.2.2“All aseXML messages will comply with the R13 release of the aseXML schema”	MGB
22/03/2004	2.8	Included new event code 3022 for CATSChangeRequest – Logica CR27	JB
22/03/2004	2.8	Included new cancellation reason codes for concurrent reconnection/ disconnection – Logica CR30.	JB
22/03/2004	2.8	Moved BLHR transaction from BAR to DPR section of document [CCN11].	JB
25/03/2004	2.8	Added section 3.6 to describe the Low Volume Interface [CCN9]	IPH
30/03/2004	2.8	Modifications to CATSChangeAlert (may not be sent by network operator) – sections 8.1.1, 8.1.2 & 8.1.15.	JB
05/04/2004	2.8	Modifications to PROV-BSD for REMCo CR05 (CU_EFFECTIVE DATE).	JB
05/04/2004	2.8	Modifications to TFR-MAR-NOTF for REMCo CR02 (change to RMR rule 101).	JB
05/04/2004	2.8	Modifications to DSD transaction and examples for Logica CR25 version 2.	JB

05/04/2004	2.8	Modifications to the following sections to remove incorrect event codes 2127 and 2128: 8.1.3.2.2, 8.1.3.3.2, 8.1.5.2.2, 8.1.5.3.2, 8.1.12.2.2, 8.1.14.2.2, 8.1.14.3.2, 8.3.3.2.2, 8.4.3.2.2, 8.5.3.2.2, 8.6.3.2.2 As per REMCo issue R263 (REMCo CR08).	JB
06/04/2004	2.8	Modifications to sections 8.8.2 and 8.8.15 (REQ-HSD notice) for REMCO issue R272 (REMCo CR08).	JB
06/04/2004	2.8	Modification to section 8.3.3.1 to correct element path (DateServiceOrderCompleted) for GasMeterNotification/MeterFix transaction; REMCo issue R287 (REMCo CR08).	JB
06/04/2004	2.8	Removed unused field volumetric_inflow from Appendix A, as per REMCo issue R322 (REMCo CR08).	JB
14/04/2004	2.8	Modified ftp inbox text (section 3.4.1.1), as per Logica CR32	IH
14/04/2004	2.8	Modified time zone sections for ebXML/aseXML and csv, as per Logica CR31, Version 4 and REMCo CR08 R324	IH
15/04/2004	2.8	Fixed usage text for 'RequestId' in Section 8.1.7.1 as per Logica CR33	IH
15/04/2004	2.8	Added Transaction Groups for aseXML transactions as per REMCo CR03	IH
15/04/2004	2.8	Added Section 3.4.1.8 for upper case CSV filenames and extensions, as per REMCo CR06	IH
15/04/2004	2.8	Included in Section 3.4.1.8 and updated section 3.4.3.1 for date/time in csv filename as per REMCo CR13	IH
15/04/2004	2.8	Added clarification text around csv acknowledgements to sections 3.4.2.4 and 3.4.2.5.2 as per REMCo CR11	IH
15/04/2004	2.8	Updated aseXML Negative Acknowledgement and duplicate processing section in line with Paper released to Market, as per REMCo Issue R323 and R264 (REMCo CR08)	IH
15/04/2004	2.8	Added comment to section 3.2.7.2.1 stating that Duplicates are not forwarded to the RMA as per REMCo CR12	IH
15/04/2004	2.8	Updates as per REMCo CR008 <ul style="list-style-type: none"> • Update value of PUSA in examples as per R47 • Update definition of SWING_GAS_QUANTITY definition to NUM(10,0) as per 234 	MV

		<ul style="list-style-type: none"> • Update definition of CONSUMPTION_HR01 - HR24 definition to NUM(11,0) as per 234 • Update definition of BID_PRIORITY to NUM(2,0) as per 234 • Update definition of NSL to NUM(11,2) as per 234 • Update definition of units NORMALISATION_FACTOR to NA • Update definition of MCP_ANUSA to MCP-TANUSA as per R239. Change units to Cents per MJ • Add definition of DELTA_SBRA and DELTA_BWRA to the csv appendix as per R285 • Change UUAFGRA to UDURA as per R286 • Delete VOLUMETRIC_INFLOW and FLOW_WEIGHTED_AVERAGE_HEATING_RATE from appcsv appendix as per R322 	
15/04/2004	2.8	Add GAA flow definition as per CCN11	MV
15/04/2004	2.8	Alter the GPMD flow definition as per CCN11 and R322 Update the BID-ALLOC as per CCN11.	MV
15/04/2004	2.8	<p>Changes to the csv data dictionary as per CR08 ref R50.</p> <p>Add the following definitions:</p> <ul style="list-style-type: none"> • USAGE_PRECEDENCE • PIPELINE_OPR_GBO_ID • REMOVAL_REASON • TBRA • ALLOCATION_PRECEDENCE • PRICE • BID_PRICE <p>Rename</p> <ul style="list-style-type: none"> • DEEMED_INJECTIONS to DEEMED_INJECTION <p>Delete the following items:</p> <ul style="list-style-type: none"> • ARF • BID_REJECTION_REASON • BWRA • DEEMED_WITHDRAWAL • EIW • ENERGY_INFLOW • GAS_ZONE • OMP_ID • RUUAFG • TOTAL_CHARGE <p>Update definition of PIPELINE_RATIO</p>	MV

15/04/2004	2.8	Update definition of PIPELINE_ID and SUB_NETWORK_ID and add their enumeration to the appendix as per LCMGCR 24.	MV
15/04/2004	2.8	Updates as per email from PP and DB: Change from NUM(11,2) to NUM(10,0) the following: <ul style="list-style-type: none"> • ANUSA • AUAFG • AUIW • AUSA • MRA Update MCP-TSS definition to NUM(11,3) in Cents/MJ	MV
15/04/2004	2.8	Update all BAR csv examples to UPPERcase header as per CR08 R283	MV
15/04/2004	2.8	Update for LCMG CR29 Change the USAGE_PRECEDENCE to ALLOCATION_PRECEDENCE for UAI flow Delete USAGE_PRECEDENCE as not used any more.	MV
15/04/2004	2.8	Update for CCN11 – new flow UAI-SUBS that is used to notify users about substituted user allocation instructions.	MV
16/04/200	2.8	Update for CCN11. Rename the shippers deemed injections to deemed injections as it is used for swing service providers as well	MV
16/04/2004	2.8	Updated all references to “Non-automated electronic file” to “Bulk electronic file”, as per REMCo CR08 R289	IH
19/04/2004	2.9	Correct order of columns in example for UPNA Correct the letters of columns names for FUAFG example to capital (USER_GBO_Id to USER_GBO_ID) Correct the letters of columns names for AUIW example to capital (USER_Gbo_ID to USER_GBO_ID) Correct column heading for user from USER_ID to USER_GBO_ID for OMP-SSP	MV
27/04/2004	2.9	Fixes as per Market review comments and Logica responses	IH
05/05/2004	3.0	Fixes as per final Market review comments and Logica responses	IH
05/05/2004	3.0	Included the following approved CRs: <ul style="list-style-type: none"> • Logica 46 – Update BAR Event codes • Logica 47 – Add MILP flow • Logica 48 – Add DGQ flow 	IH

		<ul style="list-style-type: none"> Logica 49 – More details for UAI Logica 51 – More Details for OMP-USR Logica 52 – More Details for OMP-SURPLUS Logica 53 – Change UHGA to UHSA 	
05/05/2004	3.0	<p>Added updates for REMCo CR 14 –</p> <ul style="list-style-type: none"> Add clarification for OMP-APP to Section 10.10.5.1 	IH
05/05/2004	3.0	<p>Added updates for REMCo CR 15 –</p> <ul style="list-style-type: none"> Clarifications for Review Items 71, 72 and 79 	IH
06/07/2004	3.1	<p>Added updates for REMCo CR 18 – Changes post Acceptance Testing. See CR for full list of changes.</p>	IH
3/11/2004	3.2	<ul style="list-style-type: none"> OR744. Change to section 10.6.7.1 (HDD report to network operator). OR855. Addition of event code 3411 to Appendix B for CCN20. OR774. Addition of event code 5610 to Appendix B. OR775. Addition of multiple missing event codes to Appendix B (primarily for meter reading validation). OR829. Addition of event code to Appendix B for OR609 (earliest transfer date validation). OR828. Addition of Cancellation Reason Code to Appendix C for OR821 (permanent removal cancelled due to permanent removal). OR755. Update Appendix A2, number of HDD decimal places. OR853. Included missing event code 2039 for ECNND rejections. OR806/ CCN32. Change to section 10.9.11 (DI report broken down by User) 	JB
10/11/04	3.2	<ul style="list-style-type: none"> OR0868/ CCN38. Change to sections 10.9.7.1 and 10.1. (NORM-NSL to Network Operator). 	JB
22/11/04	3.2	<ul style="list-style-type: none"> OR0875. Addition to Appendix B for OR0475 (NACK for duplicate incoming CSV message id) 	JB
08/03/2005	3.2	<ul style="list-style-type: none"> CCN43. Updated issue date in alignment with BS v3.2. 	JB

16/05/2005	3.2	<ul style="list-style-type: none"> CCN42. Modified sections 10.1, 10.2, Error! Reference source not found., 10.10.11 and Appendix A2. New sections 10.9.16 & 10.9.17. 	JB
28/07/2005	3.3	CCN55-Permanent Removal Requests	MV
28/07/2005	3.3	CCN13a- Processing of duplicate transactions	MV
28/07/2005	3.3	CCN49-Recalculation of BAR Results	MV
11/10/2005	3.3	Correct example for GPENG flow. There was a space in front of numbers for 13 th hour.	MV
11/10/2005	3.3	Correct reference to the REMCo CSV Data format Specification in section 3.4.2.2	MV
11/04/2006	3.4	CCN19-VPN implementation – changes in the section 3.4 in regards to the FTP security.	MV
26/09/2006	3.5	CCN64 – Provision of AUAFG data - changes in section 10.9.3	DT
26/09/2006	3.5	CCN66 – Provision of historical UETW data - changes in section 10.9.15	DT
21/06/2007	3.6	BE28 – Added related notice for BE28 Gas Emergency Procedure to 10.13.4, 10.13.5 and 10.13.6 . Updated 10.1, 10.2 and Appendix A.2 to include new notices and new content types.	GH
21/06/2007	3.7	BE26 – Added Read type flag to the GPMD for SA – changes in section 9.3.5, 9.1 and Appendix A.2	AD
21/06/2007	3.7	BE29 – Added related noticed for BE26 to 10.12 and 10.13, 10.12 is a new section primarily for notices related to the recalculation of BAR, so 10.13 is now Miscellaneous.	AD
14/11/2007	3.7	CR75 –Added CALC-ESTGPMD notification to participants	GH
20/10/2008	3.8	CR81 – GRMS Refresh and Separation. Changes to Sections 3.4.2.1, 3.4.3.1 and 3.5.2.1 to reflect the separation of gateways and the introduction of 2 GBO-IDs REMCO for SA and WAGMO	RG
11/01/2010	4.0	Update for STTM changes affecting GRMS(SA)	RG
25/03/2010	4.1	Changes to text in DI and UDW reports. UDBW, UAUAFG Field name changes to UETW and UETW_HST reports. Market separation for UETW and UETW_HST reports. Added new elements to Section A.2 CSV datatypes.	RG
24/11/2010	4.2	New participant requested Meter registration and data reports	RG

		Added new “Error Codes” in Appendix B “The Registry” for CR96 Transfer of MIRN on sub-network for which User does not have shipper.	
10/03/2011	4.2	Updated MIRN_STATUS field length to 16 chars	RG
23/03/2011	4.3	Updated MIRN-UPD-RPT to put Effective_From date of meter in Gas_Day field.	RG
14/04/2011	4.3	CR103 – Settlement_Run_Id field added to STTM-DSA report	RG
14/04/2011	4.3	CR104 – 2 new error codes added for Verification of shipper	RG
14/04/2011	4.3	CR105 – New DI_HST monthly report for SA Market only	RG
01/01/2014	4.4	Added Error Event code s applicable to SA Customer and Site Details (T900) Added Changed Status Codes for SA RoLR Event (RCA & RCO) Fixed names of PCI-HST and UETW-HST reports in ICD to match system generated filenames. Update MIRN-UPD-RPT sample data; Update contractor details Fix sub-sections in Section 10 Separate PROV-ROLR-TFR for SA & WA Marked PROV-ROLR-CANC-TX as WA ONLY	AR
14/09/2015	4.5	CR119 – IN012/11 Identify Previous FRO changes applicable to SA only	ND
31/10/2016	4.6	Update to include: WA <ul style="list-style-type: none"> R02/16C – REMCo to AEMO transition changes. SA <ul style="list-style-type: none"> IN029/16 – REMCo to AEMO transition 	DM
30/04/2018	4.7	CR134 – IN003/17W Identify Previous Retailer. These changes were made in v4.5 in SA and are now applicable to WA.	RG
29/06/2018	4.8	CR141(SA) – Removal of Intra-day reports as per IN011/17 GPENG and GPENGPROF market reports WA Only. ECA report removed completely	RG
8/8/2019	4.9	CR153(SA) GRMS MIRN Deregistration Update – See Section 8.6	RG

10/02/2020	5.0	CR148 – IN006/17 Added section 2.2 FRC Hub (SA), 2.3 GBO-ID (WA) and 2.4 Gate Points (SA). Added 11.6 WWT gas zones. Updated 10.9.4 and 10.9.17. Created SA RMP References in transaction tables. CR156(SA) – Small Use Customer flag indicates a Basic meter when “Y” or true, an Interval meter when “N” or false (IN006-17)	
07/12/2021	5.1	CR159 and CR165 - aseXML schema updated to r40	AR
01/11/2022	5.2	Added Pallamana Farm Tap	AR
10/01/2023	5.3	Gas Retail Package-5-2023 RoLR Consultation	RG

1.6 Change Forecast

Prior to the Business Rules workshops, a draft version was developed to support the clarification process. In tandem with the creation of the Business Specification [BS], upon completion of the workshops, a definitive ICD was created.

The document describes the formal mapping between the physical transactions, logical data flows and the latest aseXML standards compliant schemas.

1.7 References

Mnemonic	Document	Source	Issue	Date
[RMP]	SA Retail Market Procedures	AEMO	18.0	30/04/2021
	WA Retail Market Procedures	AEMO	8.0	3/08/2020
[BS]	SA Business Specification	CGI	4.5	10/02/2020
	WA Business Specification	CGI	4.4	29/11/2021
[ICD]	This document	CGI	5.2	01/11/2022
[ASEXML]	Guidelines for Development of a Standard for Energy Transactions in XML	AEMO	4.1	-
[SP]	Specification Pack [SP]	Market Operator	6.6	04/12/2017
[MIBB]	User Guide to MIBB Reports	AEMO	10.0	23/05/2017

1.8 Abbreviations

AEMO	Australian Energy Market Operator
AseXML	Australian Standard for Energy Transactions in XML
DPR	Delivery Point Registry Entity
DEE	Data Estimation Entity
GRMS	Gas Retail Market Systems
ICD	Interface Control Document
XML	eXtensible Mark-up Language
GBO	Gas Business Operator
M2B	Market to Business
B2M	Business to Market
RMP	Retail Market Procedures (SA and WA)
STTM	Short Term Trading Market (SA only)
BS	Business Specification
BAR	Balancing, Allocation and Reconciliation
EbXML	Electronic Business using eXtensible Markup Language
CSV	Comma Separated Values
SA	South Australia
WA	Western Australia
BL	Base Load
HR	Heating Rate

Additional abbreviations may be contained in the data dictionary at Appendix A.

2 MARKET CONTEXT

2.1 Participants, Business Roles and Market Roles

2.1.1 South Australia

2.1.1.1 AEMO must have a GBO identification.

2.1.1.2 AEMO must upon issuing a FRC HUB compliance certificate:

2.1.1.2.1 notify each person required to have a GBO identification under AEMO's GBO identification; and

2.1.1.2.2 determine and issue a GBO identification for the person for each capacity in which they operate under the Procedures; and

2.1.1.2.3 record the status of the GBO identification issued under sub section 2.1.1.2.2 as "active" in the AEMO registry; and

2.1.1.2.4 within 1 business day of issuing a GBO identification under sub section 2.1.1.2.2, notify all other persons with a GBO identification of the GBO identification for the new person and provide them with the information set out in sub section 2.1.1.4.

2.1.1.3 AEMO must ensure that each person required to have a GBO identification under the Procedures has a different GBO identification for each capacity in which they operate under these Procedures, including for example, a shipper that has contracts for the transportation of gas through more than one transmission pipeline must have a different GBO identification as a shipper on each transmission pipeline; and

2.1.1.4 AEMO must ensure that the AEMO registry holds at least the following accurate information in respect of each GBO identification issued by AEMO under sub section 2.1.1.2.2:

- the name of the person;
- the capacity in which the person operates in respect of the GBO identification;
- the status of the GBO identification, being either "active", "suspended" or "deregistered";

- the person’s nominated contact details; and
- the effective date of any change to the above information.

2.1.1.5 Upon any detail changing under sub section 2.1.1.4, AEMO must within 24 hours of making the change, notify all other persons with a GBO identification that an amendment has been made and provide them with the updated information as set out in sub section 2.1.1.4.

2.1.1.6 AEMO must record a person’s GBO identification as “suspended” in the AEMO registry if the person has been issued a suspension notice in accordance with Rule 488 of the National Gas Rules (NGR).

2.1.1.7 The consequences of AEMO recording a person’s GBO identification as “suspended” in the AEMO registry are:

2.1.1.7.1 the person must continue to comply with its obligations under the Procedures; and

2.1.1.7.2 for a user - without limiting sub section 2.1.1.7.1, the user is not entitled to exercise any rights granted to it under CHAPTER 2, 4, 5 and 6.

2.1.1.8 To avoid doubt, recording a person’s GBO identification as “suspended” in the AEMO registry has no effect on the operation of CHAPTER 8. {Note: This means that a user with a “suspended” GBO identification will continue to be included in the allocation and reconciliation calculations.}

2.1.1.9 If a person was “suspended” under sub section 2.1.1.6, has been issued with a notice under 488 (5) of the National Gas Rules (NGR) that advises the suspension notice is revoked the person’s GBO identification should be marked as “active”, AEMO must record the person’s GBO identification as “active” in the AEMO registry.

2.1.1.10 AEMO must record a person’s GBO identification as “deregistered” in the AEMO registry:

2.1.1.10.1 if the person ceases to act in the capacity under these Procedures to which the GBO identification relates - upon that person ceasing to act in that capacity; and

2.1.1.10.2 if the person is no longer required to comply with the Procedures - upon AEMO being notified that the person is no longer required to comply with the Procedures;

2.1.1.11 The consequence of AEMO recording a person's GBO identification as "deregistered" in the AEMO registry is that the person is no longer required to comply with the Procedures and is not entitled to accrue any rights under the Procedures.

2.1.2 Western Australia.

According to the Retail Market Procedures [RMP] each participant in the WA Gas Retail Markets will be assigned a unique GBO Identifier. This identifier will be unique and will identify each participant as well as their business role. That is, a particular participant will have as many Gas Business Operator [GBO] identifiers as there are business roles associated with that participant.

2.1.3 Market Roles SA and WA.

The following are the valid business roles within the SA and WA markets;

Business Roles	Valid in Market
User	SA and WA
Retailer of Last Resort [ROLR]	SA and WA
Network Operator	SA and WA
Pipeline Operator	SA and WA
Shipper	SA and WA
GMA	SA and WA

Each business entity may operate with one or more Market Roles within both gas markets. For example a Participant with a Type of 'User' may be, depending on the context of the market transaction, a 'Current User' or an 'Incoming User'.

Market participants and their GBO Identifiers, the Business Roles assigned to a Participant and the Market Roles which a Participant is permitted to play in the market are to be communicated to the market prior to the commencement date of the market by the RMA as described in [RMP].

The following table outlines the valid combinations of Business Role and Market Role:

Business Roles	Market Role	Description
User	Current User	The current user for a delivery point, used when referenced in a delivery point transaction.
User	Incoming User	The incoming user in a change of user transaction.
User	Previous User	The user who was responsible for a MIRN prior to the completion of transfer, for the purposes of an transfer correction.
Network Operator	Relevant	The Network Operator to whom the transaction is relevant.
Network Operator	Provider of BL and HR	The source of the non-temperature-sensitive baseload and temperature sensitive heating rate.

The following table outlines internal elements of the GRMS that will receive specific notifications. These internal elements are defined in [BS].

Business Role	Internal Role	Description
GMA	Registry	The Delivery Point Registry of the GRMS
GMA	DEE	Data Estimation Entity of the Balancing, Allocation and Forecasting subsystem of the GRMS
GMA	Market Operations	The GRMS Market Operations Staff
GMA	RMA	The Retail Market Administrator

2.2 Specification Pack and FRC Hub (SA Only)

AEMO and participant obligations for operating with the FRC Hub are covered in the SA Retail Market Procedures version 14, clause 1.3.

2.3 Gas Zones and Gate Points (SA Only)

2.3.1 Identification of sub-networks, gas zones and gate points

2.3.1.1 A network operator must code each gas zone and each gate point in its sub-network under *Section 2.3.2*.

2.3.1.2 Each sub-network and each gate point as at the go-live date is listed with its identifying code in *Section 2.3.2*.

2.3.1.3 A network operator, acting as a reasonable and prudent person, may propose to establish a new sub-network that is not listed with an identifying code in the *section 2.3.2* in which the network operator's GDS resides, and if it does so, it must notify AEMO of the proposed new sub-network, and of the HDD zone for the new sub-network, at least 20 business days before the sub-network becomes operational.

2.3.1.4 Upon receipt of notification under *section 2.3.1.3*, AEMO must verify the establishment of the new sub-network, and, if satisfied with its verification, must publish to each participant, pipeline operator and prescribed person an update to the relevant section of *2.3.2* specifying the new sub-network and its identifying code and any applicable new gate point and its code, and an update to Appendix B *of the SA RMP*, specifying the HDD zone for basic-metered delivery points in the new sub-network.

3 COMMUNICATION INTERFACES WITHIN THE MARKET

3.1 Overview

This section describes in detail the various categories of communication and their associated methods of transporting data to and from the GRMS central systems.

Five categories of communication have been identified and are described in the table below.

Type of Dataflow	Description
<i>AseXML</i>	An automated ebXML/aseXML transaction, routed via the Hub
<i>Bulk electronic file</i>	A csv file which has a defined structure, which can be automatically processed, but does not have aseXML wrapping. This file has a non-specific method of transport. It can be delivered by any means other than ebXML/aseXML or secure FTP.
<i>Automated electronic file</i>	A csv file which has a defined structure, which can be automatically processed, but does not have aseXML wrapping. This file type will be transferred using secure ftp, as defined in section 3.4.
<i>Notice</i>	An unstructured instruction <i>in writing</i> , such as fax, physical letter, email etc. Minimum requirements for this type of communication are detailed in section 3.5
<i>Acknowledgement</i>	Dependent upon the method of transport for the initiating transaction, the acknowledgement of that transaction will be one of the following: <ul style="list-style-type: none"> • An aseXML transaction acknowledgement, as defined in the aseXML guidelines document and outlined in section 3.2.7 • An ftp csv acknowledgement, as defined in section 3.4.2.5.

3.2 ebXML / aseXML Interface

3.2.1 Background

‘A Standard for Energy Transactions in XML’ [ASEXML] provides the basis for the development of the data flows in the Gas Retail Market. AseXML was developed by the Combined Gas and Electricity IT Architecture Working Group of Australia and provides a de-centralised approach to the development of energy transactions. The standard [ASEXML] describes the use of XML in developing electronic data flows and provides for addressing,

acknowledging, referencing and grouping of data flows. Guidelines are provided to implement a change management process on the schemas which define the data flows.

This section outlines the concepts in aseXML which support the data flows for the Gas Retail Market. Though the standard [ASEXML] describes the physical format of messages in aseXML, some of the constructs described in it perform business level functionality and are therefore also described at a logical level.

All of the descriptions provided below are for the purposes of illustrating concepts relevant to the logical description of GRMS data flows. The aseXML standard [ASEXML] and schemas [SCHEMA] are the definitive source of these specifications.

3.2.2 AseXML Messages

An aseXML message is defined as the ‘entire XML tree starting with the <aseXML> element’.

All aseXML messages will comply with the R40 release of the aseXML schema

3.2.3 Envelope

The envelope within an aseXML message provides :

- encapsulation of all possible transactions
- routing functionality i.e. information relating to the sender, receiver and information to determine the appropriate transaction handler. This is referred to as the *header*.
- consistent error reporting

The *header* envelope of an aseXML message can be described as a logical data group :

Group Ref.	MHD	Level	1	Name	Message Header		
Group Optionality		M	Condition (if O)		Range	1	
Item Ref.	Name				Optionality		
	From				1		
	To				1		
	Message ID				1		
	Message Timestamp				1		
	Transaction Group				1		
	Priority				O		
	Market				1		

The From and To items apply to every transaction within the envelope. Where a transaction is to be sent to more than one recipient, the transaction information is required to be sent in separate messages, one to each recipient.

Transaction Group is specified in the message header to identify the set of related transactions which this message contains. Transaction Groups map onto an “application” or sub-system. Within a message, transactions must belong to the same transaction group. The transaction group in the message header allows the routing function to send the message to the appropriate sub-system without having to interrogate the individual transactions.

3.2.4 Transactions

A *transaction* is defined in the aseXML guidelines [ASEXML] as ‘a one-way exchange of information between business process level entities’. Each Level 1 *group* of a logical data flow described in this document represents a single *transaction*. Each *transaction* is assigned a unique transaction identifier by the sender. The transaction identifier allows the recipient to provide a link between the transaction acknowledgement and the original transaction.

The transaction is wrapped in a transaction container which holds information to identify and timestamp the transaction. This is described logically as follows :

Group Ref.	TCN	Level	1	Name	Transaction Container		
Group Optionality		M	Condition (if O)		Range	1	
Item Ref.	Name				Optionality		
	Transaction ID				1		
	Transaction Timestamp				1		
	Initiating Transaction ID				O		

Multiple transactions can be included within a single message, as long as they are all from the same transaction group. Note that there are performance implications of including many transactions within a single message.

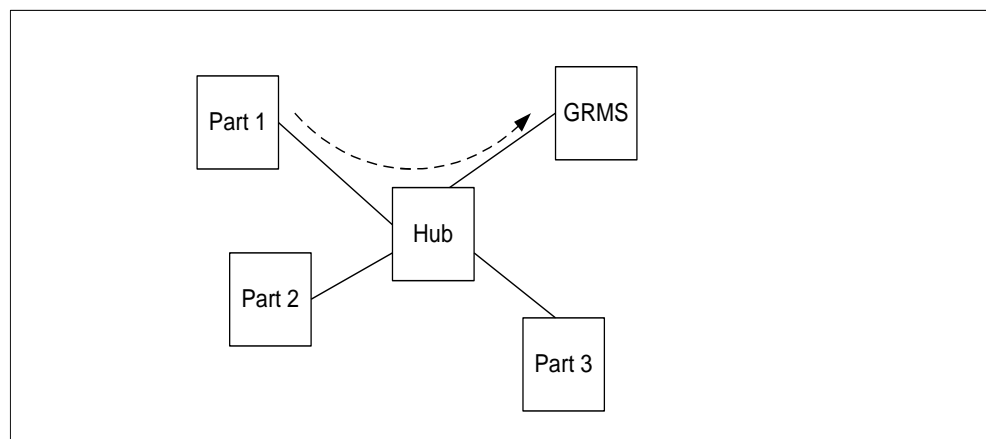
3.2.5 Acknowledgements

Acknowledgements are provided at two levels. An ebXML message acknowledgement is sent to confirm receipt of an ebXML message and to

report on the success or failure of validation against the aseXML schema definition. A transaction acknowledgement is provided when a transaction is processed by a business process level entity. The receipt of a transaction acknowledgement communicates the acceptance (or otherwise) of the responsibility to process a transaction by the sender. There shall be no aseXML message acknowledgements sent in the SA/ WA market. Each market participant and AEMO will acknowledge each ebXML message (with an ebXML message acknowledgement) and each aseXML transaction (with an aseXML transaction acknowledgement) that they receive.

3.2.6 Message Acknowledgements

The market will use the ‘hub and spoke’ architecture. A central hub that will be responsible for logging and routing market transactions. This hub will be linked to each market participant (Part 1 etc) in the market and will simplify the business-to-business and business-to-market interface, since each participant need only send messages to the hub.



All messages transferred via the hub will use the ebXML messaging standard. This will provide the additional features of guaranteed delivery, security and trusted message exchange.

All Market transactions defined using the aseXML standard will be contained within an ebXML wrapper for the purposes of security and routing by the hub. Each market participant that receives an ebXML message must respond with a message acknowledgement as defined in the Specification Pack – “FRC B2M-B2B Hub System Architecture, Version 2.01, dated 28th November 2003”. There will be no aseXML message acknowledgement distributed in the market.

See section 2.3.1.1 of the Specification Pack – “FRC B2M-B2B Hub System Architecture, Version 2.01, dated 28th November 2003” that describes the message acknowledgement model.

3.2.7 Transaction Acknowledgements

The transaction acknowledgement is described logically as follows :

Flow Ref.	TACK	Flow Name	Transaction Acknowledgement			
From Role	ANY	From Type	ANY			
To Role	ANY	To Type	ANY			
Transaction Group	See Notes*					
Group Ref.	TAC	Level	1	Name	Transaction Acknowledgement	
Group Optionality	M	Condition (if O)		Range	1	
	Item Ref.	Name			Optionality	
		Initiating Transaction ID			1	
		Receipt Date/Timestamp			1	
		Receipt ID			O	
		Status			1	
		Duplicate			O	
		Accepted Count			O	
	Group Ref.	EVT	Level	2	Name	Event
	Group Optionality	O	Condition (if O)	If Status = REJECT	Range	0-*
		Item Ref.	Name			Optionality
			Event Code			1
			Event Description			1
			Supported Version			O

Notes:
 Initiating Transaction ID corresponds to the Transaction to which this is an Acknowledgement.
 Receipt ID will be populated, but it will not be possible to use the information provided in the receipt id for any purposes outside the sender system.
 * The transaction group must be populated in the aseXML header of transaction acknowledgements and all the individual transaction acknowledgements must be of the same transaction group.

Each aseXML *transaction* carries a data attribute called a *transactionID*. This *transactionID* is a unique value generated by the sender of the transaction and is unique to the sender.. Each aseXML *acknowledgement* also carries a data attribute, the *initiatingTransactionID*.

Every aseXML transaction that is generated within the market, either by a participant or by AEMO, will initiate an acknowledgement in the receivers system. When a transaction is received by a system, it will be verified as being compliant with an aseXML schema before undergoing business validation. If business validation is successful then an *acknowledgement* will be generated to signify that the received transaction has been successfully validated and processed. If business validation fails, then a *negative acknowledgement* will be generated. A *negative acknowledgement* provides the information required for the sender to identify the problem with the initiating transaction. In both the cases of an *acknowledgement* and a *negative acknowledgement* the sender is able to pair the *transaction* with it's *acknowledgement* by matching up the *transactionID* and the *initiatingTransactionID*. The sender can then retrieve the information from a *negative acknowledgement* to identify and fix the problem that caused the original transaction to fail validation.

Status provides a summary of the success or otherwise of the processing of the transaction. A status of ‘Accept’ denotes that the transaction was processed successfully and can be considered to have been acted on. A Status of ‘Reject’ denotes that the transaction was not processed successfully and the transaction should be considered not processed. Multiple event codes may be sent in an acknowledgement where an incoming transaction is rejected by GRMS following failure of more than one validation step.

The receipt of transaction acknowledgements by the GRMS will not invoke any special system behaviour. However, upon receipt of a negative acknowledgement an email will be sent to the RMA. The RMA will take any additional action required. See Section 3.2.7.2.1 for further details).

See section 2.3.1.2 of the Specification Pack – “FRC B2M-B2B Hub System Architecture, Version 2.01, dated 28th November 2003” that describes the transaction acknowledgement model.

3.2.7.1 Generating Acknowledgements to Incoming Transactions

The GRMS provides a transaction acknowledgment for every incoming aseXML transaction that it receives (this includes duplicates – see Section 3.2.7.1.3).

3.2.7.1.1 Data elements in a Transaction Acknowledgement

The GRMS populates the following data elements in a transaction acknowledgement:

- InitiatingTransactionID – using the transaction ID in the header of the transaction received from the Sender
- ReceiptID – system generated unique number. Must be stored with the associated transaction for audit and traceability.
- ReceiptDate - system date/time (in GMT + 10:00 time)
- Status – as required (see Section 3.2.7.1.2)
- Duplicate – as required (see Section 3.2.7.1.3)
- Event(s) – as required (see Section 3.2.7.1.4)
- AcceptedCount – this is **not** populated (see Section 3.2.7.1.6)

3.2.7.1.2 Transaction Acknowledgement Status Field

The GRMS populates the status field of the transaction acknowledgement in accordance with the following:

- “Accept” is used if the transaction is accepted with no errors detected. Because of the automated nature of the system, “Warning” and “informational” events are never generated.

- “Partial” – a status of ‘Partial’ would only ever occur when processing CSV data within an aseXML transaction. The only transaction of this type that the GRMS processes is the MeterDataNotification transaction. Since this has its own MeterDataResponse transaction which contains any events, it is assumed that the transaction acknowledgement sent will always be “Accept” if the CSV data is readable and “Reject” if the CSV data is not able to be processed (see Section 3.2.7.1.4). Hence the GRMS never populates the status of an acknowledgement with “Partial”.
- “Reject” indicates the transaction was rejected and the GRMS will perform no further processing of the transaction. In the case of a request transaction, no response transactions, where normally expected, are generated. The acknowledgement carries at least one event with a severity of “Error”.
- GRMS current functionality ensures that the status is not set to “Accept” if any events are generated. The status is set based on the severity of the Events associated with the transaction. This can be summed up in the table below:

Acknowledgement contains:	Transaction Ack Status
No Events	Accept
All Events have Severity = Information	Reject/Partial *
All Events have Severity = Warning	Reject/Partial *
All Events have Severity = Error	Reject
A number of Events with a combination of Information and Warning severities	Reject/Partial*
A number of Events with a combination of Information and Error severities	Reject/Partial *
A number of Events with a combination of Information, Warning and Error severities	Reject/Partial *
A number of Events with a combination of Warning and Error severities	Reject/Partial *

* = Since the GRMS only uses the severity of “Error”, the rows marked will not be generated by the GRMS

3.2.7.1.3 Handling of Duplicate Transactions

On receipt of a transaction, the GRMS will check to see if a transaction with the same transactionID has previously been received. If it has, it will check to see if a receiptID has been assigned to the original transaction, which would indicate that the transaction had been processed and an acknowledgement already dispatched to the sender. If there is a receiptID for the original transaction, the original

acknowledgement will be found (based on its receiptID) and resent with the duplicate element set to 'Yes' and the date/time updated to the current time.

If no receiptID is logged for the original transaction, this indicates that it is still being internally processed and hence the duplicate will be discarded, as the original transaction processing will complete and send an acknowledgement in due course.

3.2.7.1.4 Transaction Acknowledgement Events

Events are populated with the following elements:

- The Code
 - The GRMS uses Event Codes as specified in the ICD and B2B specification packs.
 - Description attribute of the Code element contains the text description for the Event Code (as defined in the ICD Appendix B).
- Class - "Application".
- Severity – the GRMS uses "Error", if the entry can not be processed. A severity or "Warning" can be used if an entry could be processed, but there are no occurrences of this in the GRMS.
- Context – this element contains the portion of the input to which the event applies.
- Explanation – this element provides further explanation where a code used is of a generic nature. Usually this text is the same as the 'Description' text.
- SupportedVersions – This attribute is **not** populated.

3.2.7.1.5 AseXML Example

Positive Acknowledgement:

```
<TransactionAcknowledgement initiatingTransactionID="STUB-TX-150000012" receiptID="150000012" receiptDate="2004-06-01T09:08:00.000+10:00" status="Accept" duplicate="No" />
```

Negative Acknowledgement:

```
<TransactionAcknowledgement initiatingTransactionID="STUB-TX-150000011" receiptID="150000011" receiptDate="2004-06-01T09:00:00.000+10:00" status="Reject" duplicate="No">  
  <Event class="Application" severity="Error">  
    <Code description="MIRN already exists">3413</Code>  
    <Context>Delivery Point Id = 5000000099</Context>  
    <Explanation>MIRN should not exist in New  
Connection Business Process</Explanation>
```

```
</Event>
<Event class="Application" severity="Error">
  <Code description="Participant GBO Id is not
active">3018</Code>
  <Context>Initiating Participant Id = ZINO</Context>
  <Explanation>The Participant is not active in the
market at the current time</Explanation>
</Event>
<Event class="Application" severity="Error">
  <Code description="New Connection Effective Date
supplied is too late">3411</Code>
  <Context>NDP effective from date = 2006-12-
26</Context>
  <Explanation>New Connection Effective Date supplied
is too late</Explanation>
</Event>
</TransactionAcknowledgement>
```

3.2.7.1.6 Request Transactions with a Response (CATS transactions)

There are a number of transactions in the SA/WA markets which have a transaction response defined, in addition to sending a transaction acknowledgement. For these transactions, the following occurs:

- If the business validation fails, a negative acknowledgement is sent, in line with the details given above. No response transaction is sent in this case.
- If the business validation is successful, a positive acknowledgement is sent. Additionally, the response transaction is sent. This response transaction has a single event in it, with the following attributes:
 - Severity “Information”
 - Class “Message”
 - Code 0

3.2.7.1.7 Basic Meter Reads and Response

The functionality for the MeterDataNotification transaction is slightly different than the other aseXML transactions processed by the GRMS. This transaction has a CSV field containing meter readings. A transaction response, MeterDataResponse is also defined. This flow holds events for any readings which failed validation.

- If the MeterDataNotification does not have the required fields (as defined in the ICD, these are the record count and the CSV reading data), then a negative transaction acknowledgement is sent. No MeterDataResponse is sent in this case.
- If the MeterDataNotification does have the required fields then a positive transaction acknowledgement is sent and a MeterDataResponse containing the number of accepted meter

readings and zero or more events is sent. There will be one event for each failed meter reading. These events have a severity of “Error”.

3.2.7.2 Processing of Incoming Transaction Acknowledgements

3.2.7.2.1 Handling Negative Transaction Acknowledgements

Negative transaction acknowledgements received by the GRMS are forwarded to the RMA via email (on an hourly basis). The email will contain the TransactionAcknowledgement snippet, as well as the ‘From’ participantID, the MessageID, MessageDate, TransactionGroup and Market.

In order to reduce the load on the RMA, negative acknowledgements with the Duplicate element set to ‘Yes’ will be filtered out and not forwarded to the RMA.

3.2.7.2.2 Non-receipt of a Transaction Acknowledgement

At the transaction level, the GRMS does not perform any checks to ensure that transaction acknowledgements are received within any particular timeframe. This is in line with the AEMO view that it is a decision of the individual business how it wishes to handle transaction acknowledgements.

At the message level, acknowledgements are monitored and retries occur as defined by the FRC Hub Specification.

3.2.7.3 Processing of CATSChangeAlerts

The system will receive CATSChangeAlerts and forward them onto the Incoming User. See Section 8.1.15 for details of the physical transaction and the Business Specification for details of the use of the flow. Current functionality includes

- Accept CATSChangeAlert from the Current User
- The Identification of who is the 'sender' in the CATSChangeAlert to the Incoming User is supplied in the Alert notification to the Incoming user
- The system only accepts CATSChangeAlerts for transfers but not for error correction transactions.

3.2.7.4 AseXML Message Level Event Codes

It is possible that a message may fail message validation. Should this occur the following event codes may be returned. See Appendix B for a full list and a description of these codes.

Event Code Number
5,6,5805

3.2.8 Transaction Response Model

For some transaction sets within the aseXML schema a data exchange may continue over more than two transactions. A good example of this is the *CATSCChangeRequest* and *CATSCChangeResponse* pair. With this transaction set the 'Request' carries data required to successfully initiate a business process in the recipients system as well as the usual *transactionID* element used to uniquely identify the transaction. Upon receipt of the 'Request', and after successful completion of business validation a transaction acknowledgement is generated and returned to the sender. This transaction acknowledgement carries the usual *initiatingTransactionID* that is used by the sender to identify the acknowledgement for the original transmission (by pairing together the values of the original *transactionID* and the *initiatingTransactionID* in the acknowledgement).

Additionally, the receiver may send a 'Response' this also carries an element called *initiatingTransactionID*. So, by setting this to the value of the original *transactionID* it is possible for this 'Response' to be tied back to the initiating transaction. The purpose of this is to enable the communication of additional information that is not supported within the standard transaction/acknowledgement exchange. Specifically, in the case of a *CATSCChangeResponse*, it allows the communication of a 'Request ID' this Request ID is automatically generated by the receivers system and represents a unique reference to the business process that is initiated by the receiver after data validation checks have been successfully carried out. By communicating this *RequestID* to all the interested parties it is possible to efficiently identify a particular Recipients business process without re-sending all the relevant data elements.

3.2.9 Timestamps

All datetime type information in messages, transactions and acknowledgements will be sent from the GRMS in Market Standard Time. That is to say, all time information will be sent from the GRMS as in the GMT+10 time zone.

The time zone selected for date/time stamps in the body of aseXML transactions sent to the GRMS will be at the discretion of the sending party. The sending party must therefore ensure that the combination of the time and time zone accurately communicates the point in time being defined.

As defined in the B2B-B2M Hub Specifications and Architecture documents all date/time stamps in the messaging (ebXML) and in the headers of aseXML messages and transactions will be expressed in GMT+10 (market time).

The format used for all datetime type information will be in line with ISO 8601 Date and Time Format (see <http://www.w3.org/TR/xmlschema-2/#isoformats>). i.e.

Complete date plus hours, minutes, seconds and (an optional) decimal fraction of a second:

YYYY-MM-DDThh:mm:ssTZD (eg 2004-06-23T21:36:57.000+10:00)

where:

YYYY = four-digit year

MM = two-digit month (01=January, etc.)

DD = two-digit day of month (01 through 31)

hh = two digits of hour (00 through 23) (am/pm NOT allowed)

mm = two digits of minute (00 through 59)

ss = two digits of second (00 through 59), optionally in ss.s where

s = one or more digits representing a decimal fraction of a second

TZD = time zone designator (“+10:00” in this case)

3.3 Bulk Electronic File Interface

3.3.1 Transport Layer

In the case of the bulk electronic file category, the transport is non-specific. Possible transport options include email, ftp or a physically delivered CD-ROM or floppy disk.

3.3.2 Transport Model – Messages Sent to GRMS

The filename of the csv file sent to the GRMS should conform to the format described in section 3.4.2.1.

No formal acknowledgement is required for a Bulk Electronic file, but should such a response be required, it will be via a *notice*, unless explicitly defined otherwise.

3.3.3 Transport Model – Messages Sent by the GRMS

The filename of the csv file sent to participants should conform to the format described in section 3.4.3.1.

No formal acknowledgement is required for a Bulk Electronic file, but should such a response be required, it will be via a *notice*, unless explicitly defined otherwise.

3.4 Automated Electronic File Interface

3.4.1 Transport Layer

The transport method for files in this category will be FTP across a Virtual Private Network (VPN), specific to each market participant. Specific

directories will exist for each participant on the FTP server; these will be notified to market participants prior to Communications Infrastructure Testing.

3.4.1.1 Directories

Each organisation will have a directory specific to them for each jurisdiction in which they are active from which they may send or receive files to/from GRMS. This directory will have sub-directories for each GBO ID which that organisation uses. Under each of the directories will be the *in* and *out* directories.

i.e:

/organisation identifier/[SA | WA]/GBO_ID/in

/organisation identifier/[SA | WA]/GBO_ID/out

For example, Acme Retail participates in the SA market as a retailer. the same organisation acts as a shipper and swing service provider. It has the following GBO IDs (note that these do not follow a specific format; the specific format, if any, has yet to be defined by AEMO):

ACMERRET For the retailer (user) entity

ACMERSHPR For the shipper entity

ACMERSSP For the swing service provider entity

Acme Retail would have the following directories on the FTP server:

/ACMER/SA/ACMERRET/in (for messages from the participant to GRMS)

/ACMER/SA/ACMERRET/out (for messages from GRMS to the participant)

/ACMER/SA/ACMERSHPR/in (for messages from the participant to GRMS)

/ACMER/SA/ACMERSHPR/out (for messages from GRMS to the participant)

/ACMER/SA/ACMERSSP/in (for messages from the participant to GRMS)

/ACMER/SA/ACMERSSP/out (for messages from GRMS to the participant)

When organisation logs onto the server, their 'home' directory will be

/ACMER

From here, they can change directory to the appropriate GBO ID directory. This allows a representative from the organisation to submit files in multiple roles (and hence GBO IDs) in the same log on session.

3.4.1.2 Security

The security of data transactions which are passed between market participants and the GRMS over the internet will be established using the Virtual Private Network (VPN). A VPN is essentially an encryption tunnel; it uses encrypted IPSEC connections at known end-points to implement transaction security.

A VPN will be established between each individual market participant and the GRMS. This will allow for encryption across either (i) the entire communications channel between the market participant's firewall appliance and the GRMS firewall appliance, or (ii) the connection between a client machine and GRMS firewall appliance.

Participants will be provided with a username and password to allow access to the FTP server and upon logon shall only be able to access those directories required to submit and receive *automatic electronic files*.

Each file in the participant *in* directory will be further authenticated by checking that the sender in the envelope header (or file name) matches the directory the file is found in.

3.4.1.3 Polling Frequency

The maximum permitted frequency of participants polling their *out* directory is to be 30 seconds, if polled by an automatic process, or an average of 30 seconds, if polled manually. Participants are free to poll the *out* directory less frequently than this if desired.

This interface is not designed with the same scalability, and performance in mind as the ebXML interface, and as such, high frequency continuous polling or very high volumes of transactions are not anticipated.

The GRMS will endeavour to poll participants' inboxes every 10 seconds. This may vary depending on system loads, the number of files in the inboxes etc. The Market expectation is that this polling should happen at least once a minute as a worst case.

3.4.1.4 Compression

Files containing transactions must be compressed to allow efficient use of bandwidth. Files containing transactions sent to and from GRMS are to be compressed by the sender prior to sending. Compression is to be carried out using the Zlib standard (RFC 1950), which is supported by winzip, pkzip etc. All Acknowledgement files are not to be compressed.

CSV files sent to and from the GRMS are limited to a 2MB size limit when **unzipped**.

3.4.1.5 File Receipt

A file sent to the GRMS by a participant should be considered received by the GRMS if the FTP transfer completed successfully and the file has been renamed by the sender from a .tmp to .zip file extension. If the FTP transfer did not complete successfully then the participant should re-try until the file transfer completes successfully.

GRMS will initiate processing of received files in order of receipt. All of the data within the CSV file will be treated as a single transaction to be processed.

3.4.1.6 Timestamps

A file is deemed to have been received by the GRMS at the moment when it has been renamed from .tmp to .zip in the market participant's *in* directory, as described in 3.4.2.1 and 3.4.3.1.

A file is deemed to have been sent by the GRMS at the moment it has been named either .zip or .ack or .dup in the participant's *out* directory.

All datetime type information including the datetime implied in the outgoing csv filename (see section 3.4.3.1), any datetimes used in the transactions within a csv file and the timestamps within csv acknowledgements will be sent from the GRMS in Market Standard Time. That is to say, all time information will be sent from the GRMS as in the GMT+10 time zone.

The timestamp implied in the outgoing csv filename is the message creation time, rather than the business process transaction time, although these should be very close under normal circumstances.

The time zone selected for date/time stamps in the body of csv transactions sent to the GRMS will be at the discretion of the sending party. The sending party must therefore ensure that the combination of the time and time zone accurately communicates the point in time being defined. There are no such time/date fields identified at present.

The format used for all datetime type information (apart from the date/time stamp implied in the outgoing csv filename – see section 3.4.3.1 for further details of this) will be in line with ISO 8601 Date and Time Format (see <http://www.w3.org/TR/xmlschema-2/#isoformats>). i.e.

Complete date plus hours, minutes, seconds and (an optional) decimal fraction of a second:

YYYY-MM-DDThh:mm:ssTZD (eg 2004-06-23T21:36:57.000+10:00)

where:

YYYY = four-digit year

MM = two-digit month (01=January, etc.)

DD = two-digit day of month (01 through 31)

hh = two digits of hour (00 through 23) (am/pm NOT allowed)

mm = two digits of minute (00 through 59)

ss = two digits of second (00 through 59), optionally in ss.s where

s = one or more digits representing a decimal fraction of a second

TZD = time zone designator (“+10:00” in this case)

3.4.1.7 Re-sending Messages

In the event of transactions being lost due to a system failure or data transfer failure it may be necessary to re-send files to or from the GRMS. The criteria for selection of these files is to be all files sent between two times. When re-sending, the file to be re-sent is to be re-transmitted as originally sent i.e. with the same filename and message/transaction identifiers. Validation of message id uniqueness will ensure that the same transaction will not be processed by the recipient more than once if the recipient has already received the file.

3.4.1.8 Filename Structures for csv Files

The filename structure is case sensitive. It must be upper case for all parts of the filename.

eg

WAGAS_UAI_ALINTARWA_WAGMO_20040501143526.ZIP

Or

SAGAS_UAI_AGL_REMCO_20040501143526.ZIP

Note that the 14 character alphanumeric unique identifier will have the following structure for csv files sent *from* the GRMS:

<datetime><sequence>

where

<datetime> is YYYYMMDDhhmm

<sequence> is a 2 digit value ranging from ‘00’ (zeroes) to ‘ZZ’

The filenaming formats are described separately in sections 3.4.2.1, 3.4.3.1, 3.6.2.1 and 3.6.3.1.

3.4.2 Transport Model – Messages Sent to GRMS (B2M)

3.4.2.1 Participants Push Message to GRMS

Market Participants will create a csv message file (with a .CSV extension – note the case), compress it using zip, change the file extension to .TMP and push it to their Inbox. Whilst the file is being created it has the file name suffix .TMP. Once the file transfer is complete the file will be renamed in one

atomic (uninterruptible) operation (rather than a copy and a rename). The file will be renamed to change the file name suffix from .TMP to .ZIP.

Filename format for file is :

The FRC Market	Either “WAGAS” or “SAGAS”
Fixed Character	[_]
The Flow Reference	[0-9A-Z]
Fixed Character	[_]
GBO ID Initiator	[0-9A-Z]{1,10}
Fixed Character	[_]
GBO ID Recipient	[0-9A-Z]{1,10} (“REMCO” for all SA B2M) (“WAGMO” for all WA B2M)
Fixed Character	[_]
Unique ID	[0-9A-Z]{1,14} (This could be date time, in YYYYMMDDhhmmss format)
File name suffix	(TMP ZIP)

e.g. WAGAS_UAI_ALINTARWA_WAGMO_20040501143526.ZIP

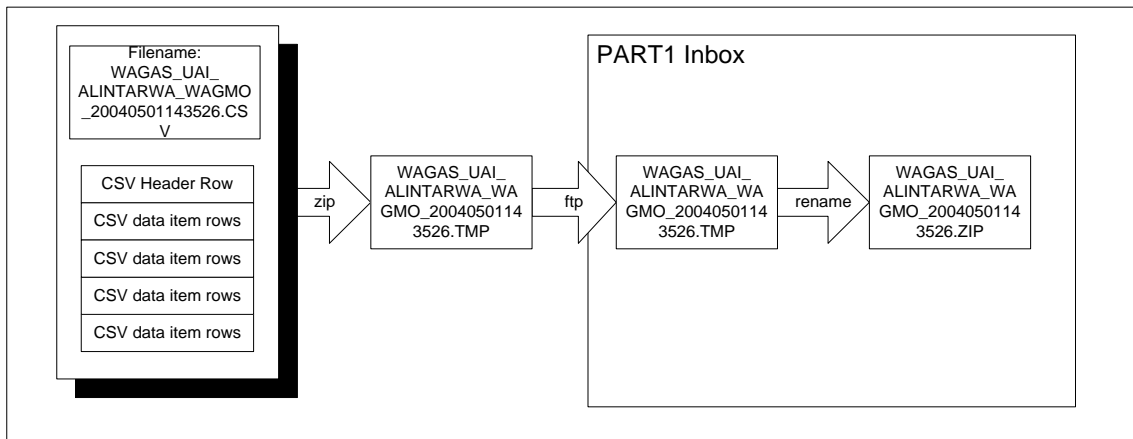
or

SAGAS_UAI_AGL_REMCO_20040501143526.ZIP

The filename prior to zipping will be the same as the zipped filename, but with a .CSV extension.

Only files that start with “WAGAS_” or “SAGAS” with a file extension of “ZIP” shall be considered for processing.

Only data for a single transaction should be in any particular .CSV file. That is, only a single csv component (which consists of a single header row and many csv data rows) is allowed in any particular .CSV file.



3.4.2.2 CSV Format

The formatting conventions for the contents of csv files are defined in the CSV Data Format Specification which forms a component of the Specification Pack [SP].

3.4.2.3 GRMS Removes the .ZIP file

Once the file has been atomically renamed to a .ZIP file, the GRMS will poll the directory and remove the file. The removal of the file indicates that the GRMS is processing the file.

3.4.2.4 GRMS Performs Business Level Validation

The GRMS will perform business level validation as described in the Business Specification on the transaction contained within the csv file. This will include validating the filename (since it contains business information). Once the csv transaction has been validated the GRMS will place a 'csv acknowledgement' in the participant's Outbox. The csv acknowledgement will have the same file name as the message filename but with a filename suffix of .ACK. Acknowledgement files will not be zipped.

e.g. Original csv Message :
 WAGAS_UAI_ALINTARWA_WAGMO_20040501143526.ZIP
 Or
 SAGAS_UAI_AGL_REMCO_20040501143526.ZIP
csv Ack :
 WAGAS_UAI_ALINTARWA_WAGMO_20040501143526.ACK
 Or
 SAGAS_UAI_AGL_REMCO_20040501143526.ACK

The csv acknowledgement could arrive some time after the original message was placed into the Inbox. Each message will have one and only one corresponding transaction acknowledgement message that will contain one and only one csv acknowledgement.

Should a file with the same filename be submitted more than once, a file with the same name but a .DUP (for duplicate) will be placed in the participant's Outbox. The content of the .DUP file will take the form of an acknowledgement with a header row and a single data row with event code 5800 (duplicate zip filename). This will prevent the original copies of the .ACK file from being overwritten.

3.4.2.5 Format of a csv Acknowledgement

The format of a csv acknowledgement is defined below.

3.4.2.5.1 Logical Flow

Flow Ref.								CSVACK		Flow Name		CSV Acknowledgement			
From Role				GMA		From Type		GRMS							
To Role				ANY		To Type		ANY							
Transaction Group				n/a											
Group Ref.								CAC	Level	1	Name	CSV Acknowledgement			
Group Optionality				M		Condition (if O)				Range	1				
		Item Ref.	Name								Optionality				
		51	Receipt Timestamp								1				
		15	Status								1				
Group Ref.								EVT	Level	2	Name	Event			
Group Optionality				O		Condition (if O)		If Status = R		Range		0-*			
		Item Ref.	Name								Optionality				
		16	Event Code								1				
		17	Event Description								1				
		152	Context								1				
Notes:															

3.4.2.5.2 Physical Mapping

The csv columns for this flow are:

Logical Name	Physical Name
Receipt Timestamp	RECEIPT_DATETIME
Status	STATUS
Reason Code	EVENT_CODE
Reason Description	EVENT_DESCRIPTION

Context	CONTEXT
---------	---------

The Receipt timestamp will provide the date and time at which the corresponding CSV file was received by the GRMS.

The status will provide a coded to indicate the result of processing the corresponding CSV file. The allowable values for this status field will be "PARTIALFAIL","FAIL"

The reason code will provide and event code to identify a particular error.

The reason description will include a textual description of the reason code.

The context will provide sufficient data items from the corresponding CSV file to uniquely identify the row or rows that failed validation for the specific event code. This field shall be surrounded by double quotes ("").

Upon successful processing of a CSV file the acknowledgement will include the CSV file header only.

Example:

```
RECEIPT_DATETIME,STATUS,EVENT_CODE,EVENT_DESCRIPTION,CONTEXT
```

In the event of a partial failure, a header line and data rows will be included in the acknowledgement. These data rows will provide the information needed to identify the row or rows that failed validation and the reason for the validation failure.

Example:

```
RECEIPT_DATETIME,STATUS,EVENT_CODE,EVENT_DESCRIPTION,CONTEXT  
2003-10-01T08:37:20+10:00,PARTIALFAIL,EC0001,MIRN Does not exist,"5421234587,01-09-2003"
```

In the event that no rows were successfully processed, that is all CSV data fails validation, a header and data rows will be included in the acknowledgment for all CSV data submitted for processing. These data rows will provide the information needed to identify the reason for each validation failure.

Example:

```
RECEIPT_DATETIME,STATUS,EVENT_CODE,EVENT_DESCRIPTION,CONTEXT  
2003-10-01T08:37:20+10:00,FAIL,EC0001,MIRN Does not exist,"5421234587,01-09-2003"  
2003-10-01T08:37:20+10:00,FAIL,EC0002,MIRN not associated with user on date,"5421234587,01-08-2003"  
2003-10-01T08:37:20+10:00,FAIL,EC0003,Invalid Date,"5421234587,01-99-2003"  
2003-10-01T08:37:20+10:00,FAIL,EC0001,MIRN Does not exist,"xxxxxxxxxx,01-09-2003"
```

To summarise:

- A positive acknowledgement will only contain 1 row; that is the header row.
- A negative acknowledgement will contain at least 2 rows; one for the header and one for each event code.
- The format of the .dup is the same as the acknowledgement (.ACK), however it will only have the event code 5800 (duplicate zip filename)
- The .DUP does not contain the data of the original acknowledgement.

- The .DUP will be overwritten if the participant sends in a third file with a name that already has a corresponding .ACK and .DUP

3.4.2.6 CSV ‘Message’ Level Event Codes

It is possible that a message may fail message validation. Should this occur the following event codes may be returned. See Appendix B for a full list and a description of these codes.

Event Code Number
5,6,5800-5806

3.4.2.7 Participant Pulls csv Acknowledgement

The participant will pull the csv acknowledgement. The csv acknowledgement will indicate whether each transaction passed business validation or not.

3.4.2.8 Participant Deletes Acknowledgements

Once the participant has examined the .ack file, he should delete it from his out box. Acknowledgments that are not deleted will be removed by the GRMS after 14 days.

3.4.3 Transport Model – Messages Sent by the GRMS (M2B)

3.4.3.1 GRMS Puts Message in Participant Outbox

GRMS will create a message (with .CSV extension – note the case), compress it using zip and place it in a participant’s Outbox.

Filename format for file is:

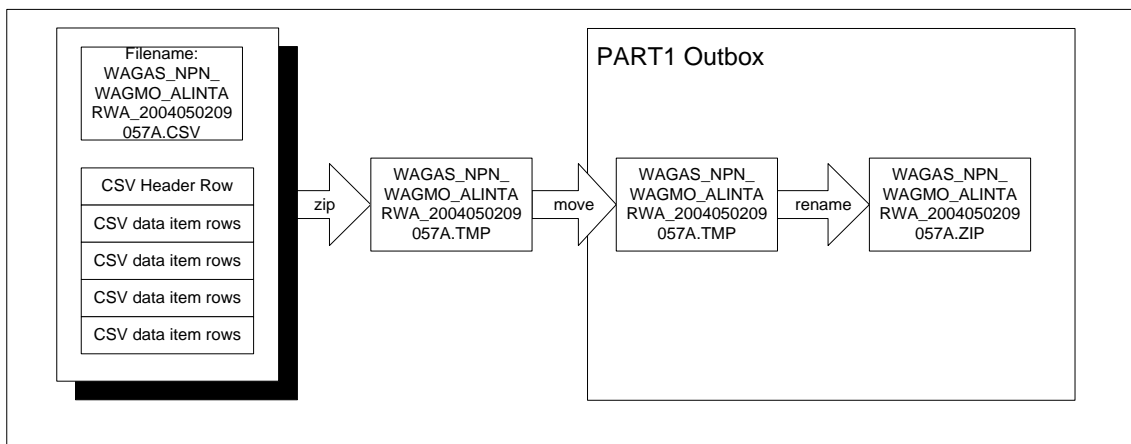
The FRC Market	Either “WAGAS” or “SAGAS”
Fixed Character	[_]
The Flow Reference	[0-9A-Z]
Fixed Character	[_]
GBO ID Initiator	[0-9A-Z]{1,10} (“REMCO” for all SA M2B) (“WAGMO” for all WA M2B)
Fixed Character	[_]
GBO ID Recipient	[0-9A-Z]{1,10}
Fixed Character	[_]

Unique ID	[0-9A-Z]{1,14} (This will be datetime to the minute, in YYYYMMDDhhmmnn format, where nn is a two digit sequence id which can range from '00' to 'ZZ')
File name suffix	(TMP ZIP)

e.g. WAGAS_NPN_WAGMO_ALINTARWA_2004050209057A.ZIP

or

SAGAS_NPN_REMCO_AGL_2004050209057A.ZIP



3.4.3.2 Participant Pulls the Message

The participant will pull the message. Once the participant has examined the message file, he should delete it from his out box. Messages that are not deleted will be removed by the GRMS after 14 of days.

3.4.3.3 Participants do not Generate csv Acknowledgements

No csv acknowledgement is to be provided by the participant.

3.5 Notice Interface

3.5.1 Transport Layer

Notices are defined as any written communication and as such the transport is non-specific. Possible transport options include email, fax or a physically delivered letter.

3.5.2 Required information

Whilst notices are by nature not automated, they should conform at least to the following proforma information, in order to enable notices to be tracked and referenced in follow-up responses. Notices which do not meet this minimum requirement will not be able to be actioned and may not be

acknowledged at all if, for example, the senders’ GBO identifier is not included.

- The FRC Market
- The Flow Reference
- GBO ID of the Initiator
- GBO ID of the intended Recipient
- Date and time the notice was sent
- A Notice Reference ID generated by the sender which is unique across their organisation
- Any Unique Notice Reference Id to which this notice relates

3.5.2.1 GRMS Email Notices to Participants

The GRMS intends to send email notices with the following format for the subject:

The FRC Market	Either “WAGAS” or “SAGAS”
The Flow Reference	[0-9A-Z]
GBO ID Initiator	[0-9A-Z]{1,10}
GBO ID Recipient	[0-9A-Z]{1,10} (“REMCO” for all SA B2M) (“WAGMO” for all WA B2M)
Unique Notice ID	[0-9]{1,14}

The fields in the table above go to form the subject field when separated by ‘_’ characters. For example a notice could be identified as:

WAGAS_ECNND-CONF-NOTF_WAGMO_ALINTANWO_7035

Or

SAGAS_ECNND-CONF-NOTF_REMCO_ENVSA_7035

This allows participants to use mail routing Procedures to manage email notices based on market, type of flow, sender etc.

If a Participant replies to this notice, he should refer to the unique notice ID.

3.5.3 Transport Model – Messages Sent to GRMS

Notices intended for actioning by the GRMS will be monitored by GRMS operational staff who will report these to *the RMA*. *The RMA* will monitor notice volumes and forward valid requests to *the GRMS operations staff*.

The *RMA* should forward notices to the GRMS operations staff using the agreed email address, fax number or mailing address.

3.5.4 Transport Model – Messages Sent by the GRMS

The GRMS may automate some outgoing notices to participants, in the form of emails. The GRMS will hold a single email address for each participant GBO identifier in the system and use this address in all *notice* category communications.

3.6 Low Volume Participant Interface (WA Only)

3.6.1 Transport Layer

The Low volume interface allows certain market participants to submit aseXML payload ‘snippets’ via the ftp interface. These snippets are then wrapped in ebXML and submitted to the FRC Hub via the GRMS ebXML gateway, on behalf of the relevant participant.

Transactions and transaction acknowledgements bound for the low volume participants are forwarded by the FRC hub to the GRMS ebXML gateway. The GRMS then strips the aseXML payload out of the ebXML message and forwards the resultant ‘snippet’ to the low volume participant’s XML outbox.

Participants wishing to send ebXML transactions to a low volume participant address their messages to the end participant as normal.

3.6.1.1 Directories

Each low volume participant will have a directory specific to them for each jurisdiction in which they are active from which they may send and receive aseXML messages to/from the GRMS. This directory will have sub-directories for each GBO ID which that organisation uses. Under each of the directories will be the aseXML *in* and *out* directories.

i.e:

/organisation identifier/[SA | WA]/GBO_ID/xmlin

/organisation identifier/[SA | WA]/GBO_ID/xmlout

For example, Acme Retail is a low volume participant in the SA market. It has the following GBO ID:

ACMERRET For the retailer (user) entity

Acme Retail would have the following directories on the FTP server for aseXML sending and receiving:

/ACMER/SA/ACMERRET/xmlin	(for snippets from the participant to the market)
/ACMER/SA/ACMERRET/xmlout	(for messages from the market to the participant)

When organisation logs onto the server, their ‘home’ directory will be

/ACMER

From here, they can change directory to the appropriate GBO ID directory.

3.6.1.2 Security

See section 3.4.1.2 for information on the FTP interface security.

3.6.1.3 Polling Frequency

See section 3.4.1.3 for information on the FTP interface polling frequency.

3.6.1.4 Compression

Files into and out of the low volume interface should not be zipped. Xml files sent to and from the GRMS are limited to 2MB in size.

3.6.1.5 File Receipt

A file sent to the GRMS by a participant should be considered received by the GRMS if the FTP transfer completed successfully and the file has been renamed by the sender from a .TMP to .XML file extension. If the FTP transfer did not complete successfully then the participant should re-try until the file transfer completes successfully.

GRMS will initiate processing of received files in order of receipt.

3.6.1.6 Timestamps

A file is deemed to have been received by the GRMS at the moment when it has been renamed from .TMP to .XML in the market participant’s *xmlin* directory, as described in 3.6.2.1 and 3.6.3.1.

A file is deemed to have been sent by the GRMS at the moment it has been named .xml in the participant’s *xmlout* directory.

3.6.1.7 File Format

The aseXML payload file should be composed of a full aseXML message, complete with header and one or more transactions or transaction acknowledgements, in line with the “Guidelines for Development of A

Standard for Energy Transactions in XML (aseXML)”. The file should use the ASCII 7-bit character set (unicode).

3.6.1.8 Schema Validation

Message handshaking only takes place on the ebXML side (i.e. between the GRMS ebXML gateway, the hub and other gateway enabled participants.)

The GRMS does not do any aseXML validation against the relevant schema, beyond that required to forward the transaction (such as reading the ‘TO’ participant GBO ID). Since the FRC Hub implementation of ebXML validates the payload in the message layer, any aseXML validation failure at the remote end will result in a negative message acknowledgement, which will not be forwarded to the low volume participant. It is therefore crucial that the low volume participant validates his transactions against the correct version of the schema (using XMLSpy, for example) prior to sending to the GRMS FTP server.

3.6.2 Transport Model – Messages Sent to GRMS from Low Volume Participants for Forwarding to the Hub

3.6.2.1 Participants Push Message to GRMS

Low volume participants will create an aseXML message file, with a file extension of .tmp and push it to their aseXML inbox on the FTP server. Whilst the file is being created it has the file name suffix .tmp. Once the file transfer is complete the file will be renamed in one atomic (uninterruptible) operation (rather than a copy and a rename). The file will be renamed to change the file name suffix from .tmp to .xml.

Filename format for file is :

Unique ID	This should be the aseXML message ID, as defined in the “Guidelines for Development of A Standard for Energy Transactions in XML (aseXML)”.
File name suffix	(TMP XML)

e.g. ACMERRET_2938475839.XML

3.6.2.2 GRMS Removes the .XML file

Once the file has been atomically renamed to a .xml file, the GRMS will poll the directory and remove the file. The removal of the file indicates that the GRMS is processing the file and forwarding to the FRC Hub.

The low volume participant will not get any form of acknowledgement (other than the file being removed from the directory) until the final end recipient responds with a transaction acknowledgement.

3.6.2.3 GRMS Forwards to the FRC Hub

The GRMS then wraps the aseXML message with the appropriate ebXML information and forwards the message to the FRC Hub. Note that the final end recipient of the message could be a participant with an ebXML gateway, the GRMS or another low volume participant.

3.6.3 Transport Model - Messages Sent to GRMS from the Hub for Forwarding to Low Volume Participants

3.6.3.1 GRMS Puts Message in Participant Outbox

On receiving an ebXML message which is intended for a low volume participant, the GRMS extracts the aseXML message payload and places it in the low volume participant's aseXML Outbox.

Filename format for this file is:

Unique ID	This will be the aseXML message ID, as extracted from the aseXML message payload header.
File name suffix	(TMP XML)

e.g. ACMERRET_2938475839.XML

3.6.3.2 Participant Pulls the Message

The low volume participant will pull the message. Once the participant has examined the message file, he should delete it from his out box. Messages that are not deleted will be removed by the GRMS after 14 of days.

3.6.3.3 Low Volume Participants Send and Receive aseXML Transaction Acknowledgements

Although there is no ebXML message layer handshaking between the low volume participant and the GRMS, it should be noted that the low volume participant is still bound by the aseXML guidelines and should send aseXML transaction acknowledgements for every transaction they receive. Similarly, they will receive a transaction acknowledgement from the end recipient for every transaction they send.

4 DATA TYPES

4.1 CSV Datatypes

The data items that are required to be passed in B2M and M2B communication are listed and defined in appendix A. The format of these descriptions is described below.

4.1.1 Format

Each of the properties of a data item as included in Appendix A are described below :

Element Name	The short name of the <i>element</i>
Description	A detailed description of the <i>element</i>
Logical Type	The logical type of the <i>element</i> . Allowed logical types are CHAR, NUM, DATE, DTIME (date time)
Logical Length	The logical length of the <i>element</i> . This applies to CHAR and NUM logical types. No length is required for DATE or DTIME.
Decimal Length	The length of the decimal portion of a NUM. Where specified, this is inclusive of the logical length. E.g. a NUM with a logical length of 10 and a decimal length of 2 has 8 digits to the left of the decimal place and 2 to the right.
Signed?	The sign of NUM type <i>elements</i> . Valid values are Y or N.
Units	The units of measurement which the <i>element</i> represents.
Enumeration	A list of valid values of the <i>element</i> .
Description	The textual description of the enumeration value.
Mask	The formatting mask of the <i>element</i> . <i>An</i> – n * alphanumeric characters 9 – numeric digit DD – Day (e.g. 05) MON – Month (e.g. JUL) MM – Month (e.g. 07) YYYY – 4 digit year HH – 24 Hour MI – Minutes SS – Seconds

4.2 AseXML Datatypes

aseXML datatypes are defined in the 'Physical Transaction' tables which are supplied for each physical transaction type.

The physical elements of aseXML transactions, as listed in these tables, conform with the aseXML schema and the formatting within the schema.

5 DATA FLOW ANALYSIS

5.1 Process

The process undertaken to identify candidate aseXML transactions to implement the required external system interfaces is:

- Analyse the [RMP] to identify the various logical data flows
- Analyse the [RMP] to identify the various logical data items required by each flow
- Generate table to display the description of each logical flow and data item.
- Using analysis carried out by Envestra identify any candidate transactions from the Victorian Gas Market.
- Identify whether the logical description identified from the [RMP] is supported by the candidate transaction as used in the Victorian Gas Market.
- If the logical description is supported – accept it.
- If it is not, suggest one of the following:
 - altering the optionality of data elements in the latest aseXML schema to support the required transaction.
 - adding an additional optional data element to support the required transaction.
 - create a new transaction to support the required flow.

5.2 Validation

The ICD will be cross referenced and validated against the requirements as described in the business specification [BS].

6 DATA FLOW STRUCTURE

The set of data flows described in this document support all the business processes described in [RMP] between the GRMS and all external parties.

The logical definition of a data flow has been removed to aid readability, following the mapping of Logical Flows to Physical ones.

7 MAPPING OF LOGICAL FLOWS TO PHYSICAL FLOWS

The following codes have been used throughout this document to identify the various flows by their process type.

7.1 Short Code Mapping Summary

This table defines the initial code used to classify each flow by it's associated process.

Short Code	Process
TFR	Transfer
COM	New Connection
DIS	Disconnection
REC	Reconnection
DEC	Decommission
DCN	Data Change Notice
ECNET	Error Correction Erroneous Transfer
ECNND	Error Correction Notice for New Connection and Permanent Removal
DSD	Deliver Standing Data

8 THE REGISTRY

For this section 8, references to the term Registry means:

- For South Australia, the AEMO Registry; and
- For Western Australia, the AEMO Registry.

In the interests of keeping new terms and acronyms to a minimum, the original word “Registry” has been *italicised* where possible to indicate that its definition again depends on its location

8.1 Transfer and Change of Standing Data (Erroneous Transfer Correction)

The Transfer section of the [RMP] deals with the transfer of customers from one user (current user) to another user (incoming user). Since the customer is assigned a delivery point this is equivalent to transferring gas deliveries at a delivery point from the current user to the incoming user.

When looking for a candidate aseXML transaction to support a required Transfer logical flow the approach will be to try and re-use a suitable transaction from the CATS (CustomerTransfer) application. Where technically feasible this will be the CATS transaction as used in the Victorian gas market for a similar data exchange.

An ‘erroneous transfer correction’ is a request initiated by the user that was previously associated with a delivery point. This is a request to correct a transfer that may have occurred in error. The process that follows this request is precisely the same as that for a transfer.

Throughout this section reference is made to the ‘previous’ user. Such a user is conceptually the same as the incoming user, as referred to in the transfer process.

8.1.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref	BS Ref.
CATSChangeRequest		TFR-REQ	Incoming User	The <i>Registry</i>	aseXML	CATS	80	6.1.4	80
		ECNET	Previous User	The <i>Registry</i>	AseXML	CATS	32	9.1.1	32
CATSChangeResponse		TFR-NOTF-IU	The <i>Registry</i>	Incoming User	aseXML	CATS	85	6.2.4	85
		ECNET-NOTF-PU	The <i>Registry</i>	Previous User	AseXML	CATS	35	9.1.3	35
CATSChangeWithdrawal		TFR-WREQ	Incoming User	The <i>Registry</i>	aseXML	CATS	95	6.4.1	95
		ECNET-WDR	Previous user	The <i>Registry</i>	aseXML	CATS	43	9.1.9	43
CATSDataRequest		TFR-MAR-NOTF	The <i>Registry</i>	Incoming User/ Current User	aseXML	CATS	101	6.7	101
CATSNotification	REQUESTED	TFR-NOTF-CU	The <i>Registry</i>	Current User	aseXML	CATS	85	6.2.4	85
		TFR-NOTF-NO	The <i>Registry</i>	Network Operator	aseXML	CATS	85	6.2.4	85
		TFR-WOB-NOTF-IU*	The <i>Registry</i>	Incoming User	aseXML	CATS	93	6.3.4	93
		TFR-WOB-NOTF-OP*	The <i>Registry</i>	Objecting Participant	aseXML	CATS	93	6.3.4	93
		ECNET-NOTF-NO	The <i>Registry</i>	Network Operator	AseXML	CATS	35	9.1.3	35
		ECNET-NOTF-CU	The <i>Registry</i>	Current User	AseXML	CATS	35	9.1.3	35
		ECNET-WOB-NOTF-OP*	The <i>Registry</i>	Objecting Participant	AseXML	CATS	41	9.1.7	41

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref	BS Ref.
		ECNET-WOB-NOTF-PU*	The Registry	Previous User	AseXML	CATS	41	9.1.7	41
	PENDING	TFR-PEND-MI-NOTF	The Registry	Incoming User/ Current User/ Network Operator	aseXML	CATS	98	6.5.1	98
		TFR-PEND-NOTF	The Registry	Incoming User/ Current User/ Network Operator	aseXML	CATS	100	6.6	100
		ECNET-PEND-NOTF	The Registry	Incoming User/ Current User/ Network Operator	aseXML	CATS	46	9.1.11	46
	OBJECTION*	TFR-OBJ-NOTF-IU	The Registry	Incoming User	aseXML	CATS	90	6.3.2	90
		ECNET-OBJ-NOTF-PU	The Registry	Previous User	AseXML	CATS	38	9.1.5	38
	CANCELLED	TFR-CAN-NOTF	The Registry	Incoming User/ Current User/ Network Operator	aseXML	CATS	94	6.5.2	94
							99	4.5	99
							133	6.4.2	133
							97	6.7	97
						101		101	

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref	BS Ref.
		ECNET-CAN-NOTF	The <i>Registry</i>	Previous User/ Network Operator/ Current User	aseXML	CATS	42 45 31 134	9.1.8 9.1.10 4.1	42 45 31 134
	COMPLETED	TFR-CONF-NOTF	The <i>Registry</i>	Incoming User/ Current User/ Network Operator	aseXML	CATS	103	6.8.2	103
		ECNET-CONF-NOTF	The <i>Registry</i>	Previous User/ Network Operator/ Current User	aseXML	CATS	46	9.1.11	46
CATSObjectionRequest		TFR-OBJ-NO	Network Operator	The <i>Registry</i>	aseXML	CATS	86	6.3.1	86
		TFR-OBJ-ROLR	ROLR	The <i>Registry</i>	aseXML	CATS	87	N/A	87
		ECNET-OBJ-NO	Network Operator	The <i>Registry</i>	AseXML	CATS	36	9.1.4	36
		ECNET-OBJ-CU	Current User	The <i>Registry</i>	AseXML	CATS	36	9.1.4	36
CATSObjectionResponse		TFR-OBJ-NOTF-OP	The <i>Registry</i>	Objecting Participant	aseXML	CATS	90	6.3.2	90
		ECNET-OBJ-NOTF-OP	The <i>Registry</i>	Objecting Participant	AseXML	CATS	38	9.1.5	38

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref	BS Ref.
CATSObjectionWithdrawal		ECNET-WOB	Current User/ Network Operator	The <i>Registry</i>	AseXML	CATS	39	9.1.6	39
		TFR-WOBJ	Objecting Participant	The <i>Registry</i>	aseXML	CATS	91	6.3.3	91
CATSChangeAlert		TFR-ALERT-CU	Current User	The <i>Registry</i>	AseXML	CATS	85	6.2.4	85
		TFR-ALERT-IU	The <i>Registry</i>	Incoming User	aseXML	CATS	85	6.2.4	85

* = TFR-WOB-NOTF-IU ,TFR-WOB-NOTF-OP,ECNET-WOB-NOTF-PU and ECNET-WOB-NOTF-IU can be either “REQUESTED” or “OBJECTED” status, depending if there are any objections left outstanding after the withdrawal. These transactions are listed in the “REQUESTED” variation table.

8.1.2 Code Summary

This table is a complete list of those codes used within the *Transfer* process to uniquely identify each particular flow.

Identifier	Data Flow Name
TFR-CAN-NOTF	Transfer Cancellation Notification
TFR-CONF-NOTF	Transfer Confirmation Notification
TFR-MAR-NOTF	Transfer Request Missing Actual Read Notification
TFR-NOTF-CU	Transfer Request Notification Current User
TFR-NOTF-IU	Transfer Request Notification to Incoming User
TFR-NOTF-NO	Transfer Request Notification to Network Operator
TFR-OBJ-NO	Transfer Objection by Network Operator
TFR-OBJ-NOTF-IU	Transfer Objection Notification to Incoming User
TFR-OBJ-NOTF-OP	Transfer Objection Notification to Objecting Participant
TFR-OBJ-ROLR	Transfer Objection by ROLR

TFR-PEND-MI-NOTF	Transfer Pending Notification for move-in
TFR-PEND-NOTF	Transfer Request Pending Notification
TFR-REQ	Transfer Request
TFR-WOBJ	Transfer Objection Withdrawal
TFR-WOB-NOTF-IU	Transfer Objection Withdrawal Notification to Incoming User
TFR-WOB-NOTF-OP	Transfer Objection Withdrawal Notification to Objecting Participant
TFR-WREQ	Transfer Withdrawal Notice
ECNET	Error Correction Notice For Erroneous Transfer
ECNET-CAN-NOTF	Error Correction Cancellation Notification
ECNET-CONF-NOTF	Error Correction Notice Confirmation Notification
ECNET-NOTF-CU	Error Correction Notification of Erroneous Transfer to Current User
ECNET-NOTF-NO	Error Correction Notification of Erroneous Transfer to Network Operator
ECNET-NOTF-PU	Error Correction Notification of Erroneous Transfer to Previous User
ECNET-OBJ-CU	Error Correction Objection by Current User
ECNET-OBJ-NO	Error Correction Objection by Network Operator
ECNET-OBJ-NOTF-OP	Error Correction Objection Notification to objecting participant
ECNET-OBJ-NOTF-PU	Error Correction Objection Notification to previous user
ECNET-PEND-NOTF	Error Correction Pending Notification
ECNET-WDR	Error Correction Withdrawal Notice
ECNET-WOB	Error Correction Objection Withdrawal Notice
ECNET-WOB-NOTF-OP	Error Correction Objection Withdrawal Notification to Objecting Participant
ECNET-WOB-NOTF-PU	Error Correction Objection Withdrawal Notification to Previous User
TFR-ALERT-CU	Transfer Change Alert from Current User
TFR-ALERT-IU	Transfer Change Alert to Incoming User

8.1.3 CATSChangeRequest Transaction

8.1.3.1 Physical Transaction

NOTE: The Incoming user GBO ID will be identified in the message header.

CATSChangeRequest

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	Either: <ul style="list-style-type: none"> “0001” or “0002” to support TFR-REQ ”0003” to support ECNET 	1..1	ChangeReasonCode	xsd:string xsd:maxLength =”4”
ProposedDate	Date (10) Cyy-mm-dd	Mandatory	Represents: <ul style="list-style-type: none"> The earliest transfer Date for TFR-REQ the day the transfer took place for ECNET 	1..1	ProposedDate	xsd:date
NMI	String(10)	Mandatory	The MIRN	0..1	NMISTandingData/NMI	xsd:string length=”10”
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use=”optional ”	@checksum	xs:integer” minInclusive=”0”maxIcusive=”9 ”

8.1.3.2 Data flow Definition: Transfer Request (TFR-REQ)

A transfer request is a notice from an incoming user to the AEMO Registry to transfer gas deliveries at a delivery point specified in the request to the incoming user.

8.1.3.2.1 AseXML Example

Transfer (Move-in):

```
<CATSChangeRequest version="r29">  
  <ChangeReasonCode>0002</ChangeReasonCode>  
  <ProposedDate>2004-06-07</ProposedDate>  
  <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
    <NMI checksum="7">5000000001</NMI>  
  </NMISTandingData>  
</CATSChangeRequest>
```

Transfer (In-Situ):

```
<CATSChangeRequest version="r29">  
  <ChangeReasonCode>0001</ChangeReasonCode>  
  <ProposedDate>2004-06-10</ProposedDate>  
  <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
    <NMI checksum="7">5000000005</NMI>  
  </NMISTandingData>  
</CATSChangeRequest>
```

8.1.3.2.2 Event Codes

Event Code Number
202,3001,3002,3011,3018,3022,3022,3029,3035,3038,3407,3662

Note: In all cases the severity of each event will be “Error”.

Note: Multiple event codes may be sent where the transaction is rejected by GRMS following failure of more than one validation step.

8.1.3.3 Data Flow Definition:Error Correction Notice For Erroneous Transfer (ECNET)

This identifies a request by a user to correct a transfer that was made in error.

8.1.3.3.1 AseXML Example

```
<CATSChangeRequest version="r29">  
  <ChangeReasonCode>0003</ChangeReasonCode>  
  <ProposedDate>2004-06-10</ProposedDate>  
  <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
    <NMI checksum="5">5000000006</NMI>  
  </NMISTandingData>  
</CATSChangeRequest>
```

8.1.3.3.2 Event Codes

Event Code Number
201,202,3000,3007,3016,3022,3035,3038,3662

Note: In all cases the severity of each event will be “Error”.

Note: Multiple event codes may be sent where the transaction is rejected by GRMS following failure of more than one validation step.

8.1.4 CATSChangeResponse Transaction

8.1.4.1 Physical Transaction

NOTE: All items in the logical flow may be communicated by referring to AEMOAEMO generated RequestID. That is, since the incoming user already notified AEMOAEMO of all the data in the original request, we do not need to explicitly include it in this notification and only need the RequestID. Also, the initiatingTransactionID for the *CATSChangeResponse* will tie back to the received *CATSChangeRequest* allow the incoming user to identify all the required logical data items.

NOTE: The *Date and Time of Processing in the AEMO Registry* shall be stored in the transactionDate attribute of the transaction.

CATSChangeResponse

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer or Error Correction.	1..1	RequestID	xsd:positiveInteger maxInclusive ="999999999"
Event	Contains sub-elements. Code is defined as Numeric (10)	Mandatory	An event code of zero will be provided for all Change Responses.	1..1	Event/Code	xsd:nonNegativeInteger
Class	Enumerated String	Mandatory	Set to "Message" for all Change Responses Note: Although optional in the schema, must be set to avoid default value being used	use="optional"	@class	xsd:string
Severity	Enumerated String	Mandatory	Set to "Information" for all Change Responses Note: Although optional in the schema, must be set to avoid default value being used	use="optional"	@severity	xsd:string

8.1.4.2 Data flow Definition: Transfer Request Notification to Incoming User (TFR-NOTF-IU)

This is the notification to the incoming user to indicate that the transfer request initiated by the incoming user passed business validation and has been accepted.

8.1.4.2.1 AseXML Example Transaction

```
<CATSChangeResponse version="r29">  
  <RequestID>11034</RequestID>  
  <Event severity="Information" class="Message">  
    <Code>0</Code>  
  </Event>  
</CATSChangeResponse>
```

8.1.4.3 Data Flow Definition: Error Correction Notification For Erroneous Transfer to Previous User (ECNET-NOTF-PU)

This is notification to the previous user to identify that the particular error correction has been requested.

8.1.4.3.1 AseXML Example Transaction

```
<CATSChangeResponse version="r29">  
  <RequestID>11036</RequestID>  
  <Event severity="Information" class="Message">  
    <Code>0</Code>  
  </Event>  
</CATSChangeResponse>
```

8.1.5 CATSChangeWithdrawal Transaction

8.1.5.1 Physical Transaction

NOTE: The Incoming User GBO Identifier will be stored in the message header.

CATSChangeWithdrawal

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request or Error correction	1..1	RequestID	xsd:positiveIntegermaxInclusive="9999999999"

8.1.5.2 Data flow Definition: Transfer Withdrawal Notice (TFR-WREQ)

This flow is a request by the incoming user to withdraw their transfer request.

8.1.5.2.1 AseXML Example Transaction

```
<CATSChangeWithdrawal version="r29">
  <RequestID>55123010</RequestID>
</CATSChangeWithdrawal>
```

8.1.5.2.2 Event Codes

Event Code Number
202,3007,3018,3025,3026,3400

Note: In all cases the severity of each event will be “Error”.

8.1.5.3 Data Flow Definition: Error Correction Withdrawal Notice (ECNET-WDR)

This flow is a request by the previous user to withdraw their error correction request

8.1.5.3.1 AseXML Example Transaction

```
<CATSChangeWithdrawal version="r29">  
  <RequestID>175000006</RequestID>  
</CATSChangeWithdrawal>
```

8.1.5.3.2 Event Codes

Event Code Number
202,3007,3018,3025,3026,3025,3400

Note: In all cases the severity of each event will be “Error”.

8.1.6 CATSDataRequest Transaction

8.1.6.1 Physical Transaction

CATSDataRequest

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) "USER" – User "NO" – Network operator "GRMS" – The Gas Retail Market System.	Mandatory	The role assigned to the Sender. In this case "GRMS"	1..1	Role	xsd:string xsd:maxLength="4"
RoleStatus	String(Enum) "N" = New (incoming) "C" = Current	Mandatory	In this case "N".	1..1	RoleStatus	Enumerated list of xsd:string "N", "C".
InitiatingRequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request (move in or non-move in) that is missing an actual value.	1..1	InitiatingRequestID	xsd:positiveIntegermaxInclusive="9999999999"
NMI	String(10)	Mandatory	The MIRN in the original Change Request	0..1	NMISTandingData/NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer"minInclusive="0"maxInclusive="9"

8.1.6.2 Data flow Definition: TFR-MAR-NOTF : Transfer Request Missing Actual Read Notification

This is a notification from AEMO to indicate that a pending transfer (move in or non-move in) received an estimated value when an actual value was required.

Whilst the CATSDataRequest does not specifically describe what data is required (through some form of an 'event code', for example), the InitiatingRequestID is used to identify the transfer process that initiated this response.

8.1.6.2.1 AseXML Example Transaction

```
<CATSDataRequest version="r29">  
  <Role>GRMS</Role>  
  <RoleStatus>N</RoleStatus>  
  <InitiatingRequestID>55000009</InitiatingRequestID>  
  <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
    <NMI checksum="8">5000000009</NMI>  
  </NMISTandingData>  
</CATSDataRequest>
```

8.1.7 CATSNotification Transaction – “REQUESTED” Variant

8.1.7.1 Physical Transaction

NOTE: The Date and Time of Processing in the *Registry* shall be stored in the transactionDate attribute of the transaction.

CATSNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) “USER” – User “NO” - Network operator “ROLR” – Retailer of Last Resort	Mandatory	The role assigned to the recipient. Either: <ul style="list-style-type: none"> • “USER” to support TFR-NOTF-CU • “NO” to support TFR-NOTF-NO • “USER” to support TFR-WOB-NOTF-IU • “NO” or “ROLR” to support TFR-WOB-NOTF-OP • “NO” to support ECNET-NOTF-NO • “USER” to support ECNET-NOTF-CU • “USER” or “NO” to support ECNET-WOB-NOTF-OP • “USER” to support ECNET-WOB-NOTF-PU 	1..1	Role	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RoleStatus	String(Enum) "N" = New (incoming) "C" = Current	Mandatory	The role status assigned to the recipient. Either: <ul style="list-style-type: none"> • "C" to support TFR-NOTF-CU • "C" to support TFR-NOTF-NO • "N" to support TFR-WOB-NOTF-IU • "C" to support TFR-WOB-NOTF-OP • "C" to support ECNET-NOTF-NO • "C" to support ECNET-NOTF-CU • "C" to support ECNET-WOB-NOTF-OP • "N" to support ECNET-WOB-NOTF-PU, (since previous user can be considered the new or incoming user in the process) 	1..1	RoleStatus	Enumerated list of xsd:string "N", "C".

Participant	String (10)	Mandatory	<p>If 'Role' = "NO" then:</p> <ul style="list-style-type: none"> For Transfers (TFR-), contains the GBO Id of the incoming user that initiated the transfer when sent to the Network Operator. For Error Corrections (ECNET-), contains the GBO Id of the previous user who initiated the error correction when sent to the Network Operator. <p>If 'Role' = "USER" or "ROLR" then:</p> <ul style="list-style-type: none"> For transfers (TFR-), (1) contains the GBO Id of the incoming user that initiated the transfer when sent to the incoming user (2) contains xsi:nil = "true" when sent to the current user (We do not communicate the incoming users identity to the current user.) For error correction, (ECNET-) (1) contains the GBO Id of the incoming user that initiated the transfer when sent to the previous user (2) contains xsi:nil = "true" when sent to the current user (We do not communicate the previous users identity to the current user.) 	1..1	ChangeRequest/Participant	xsd:string
-------------	-------------	-----------	---	------	---------------------------	------------

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RequestID	Numeric (10)	Mandatory	<ul style="list-style-type: none"> • For transfers (TFR-), the unique ID assigned by AEMO to the Transfer Request. For error corrections (ECNET-), the unique ID assigned by AEMO to the Error Correction Request. 	1..1	ChangeRequest/RequestID	xsd:positiveIntegermaxInclusive="9999999999"
ChangeStatusCode	String (4) REQ = Requested PEN = Pending OBJ = Objection COM = Completed CAN = Cancelled [SA ONLY CODES] RCA = RoLR Cancelled RCO = RoLR Completed	Mandatory	Current status of the Change Request. This is "REQ" for: <ul style="list-style-type: none"> • TFR-NOTF-CU • TFR-NOTF-NO • ECNET-NOTF-NO • ECNET-NOTF-CU For TFR-WOB-NOTF-IU and TFR-WOB-NOTF-OP, status is "REQ" if no other objections outstanding or "OBJ" if other objections remain. For ECNET-WOB-NOTF-OP and ECNET-WOB-NOTF-PU: If an objection has just been withdrawn, then this will be either "OBJ" – if there are objections still outstanding or "REQ" if there are no other objections.	1..1	ChangeRequest/ChangeStatusCode	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	Either: <ul style="list-style-type: none"> “0001” or “0002” (the move-in flag) to support transfers or ”0003” to support error corrections It’s value will be the same ChangeReasonCode from the original transfer or error correction request	1..1	ChangeRequest/ChangeData/ChangeReasonCode	xsd:string xsd:maxLength="4"
ProposedDate	Date (10) ccyy-mm-dd	Mandatory	The Earliest Change Date supplied in the original transfer request in the case of transfers or the date of the original transfer that is being corrected in the case of error corrections	1..1	ChangeRequest/ChangeData/ProposedDate	xsd:date
NMI	String(10)	Mandatory	The MIRN in the original Change Request or error correction.	0..1	ChangeRequest/ChangeData/NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer" minInclusive="0" maxInclusive="9"
Participant	String (10)	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	The GBO ID of the objecting participant.	1..1	Objection/Participant	xsd:string

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionID	Numeric (10)	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	The Unique ID assigned by AEMOAEMO to the Objection Request	1..1	Objection/ObjectionID	xsd:positiveIntegermaxInclusive="9999999999"
ObjectingAction	String (Enum) "Raised" or "Withdrawn"	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	"Withdrawn"	1..1	Objection/ObjectionAction	enumerated list of xsd:string values: "Raised", "Withdrawn"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
InitiatingRequestID	Numeric (10)	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU Mandatory for : TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	The same value of RequestID as included above.	1..1	Objection/ObjectionData/InitiatingRequestID	xsd:positiveIntegermaxInclusive="9999999999"
Role	String (4) Values as above	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	Role of the objecting participant	1..1	Objection/ObjectionData/Role	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionCode	String (8) “DECLINED” = No Haulage Contract or ROLR fee is in place.	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	A valid objection reason code that is withdrawn	1..1	Objection/ObjectionData/ObjectionCode	xsd:string xsd:length = "8"
ObjectionDate	Date (10)	Mandatory for : ECNET-WOB-NOTF-OP ECNET-WOB-NOTF-PU TFR-WOB-NOTF-IU TFR-WOB-NOTF-OP Not Required for: TFR-NOTF-CU TFR-NOTF-NO ECNET-NOTF-NO ECNET-NOTF-CU	The date of that the objection was raised.	1..1	Objection/ObjectionData/ObjectionDate	xsd:date

8.1.7.2 Data flow Definition: Transfer Request Notification Current User (TFR-NOTF-CU)

This is the notification to the current user to indicate that the transfer request initiated by the incoming user passed business validation and has been accepted.

8.1.7.2.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true" />
    <RequestID>550000072</RequestID>
    <ChangeStatusCode>REQ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0001</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="2">5000000007</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

8.1.7.3 Data flow Definition: Transfer Request Notification to Network Operator (TFR-NOTF-NO)

This is the notification to the network operator to indicate that the transfer request initiated by the incoming user passed business validation and has been accepted. The objection cycle is now initiated.

8.1.7.3.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
```

```
<RequestID>550000072</RequestID>
<ChangeStatusCode>REQ</ChangeStatusCode>
<ChangeData>
  <ChangeReasonCode>0001</ChangeReasonCode>
  <ProposedDate>2004-03-10</ProposedDate>
  <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
    <NMI checksum="2">5000000007</NMI>
  </NMIStandingData>
</ChangeData>
</ChangeRequest>
</CATSNotification>
```

8.1.7.4 Data flow Definition: Transfer Objection Withdrawal Notification to Incoming User (TFR-WOB-NOTF-IU)

This is the notification to the incoming user. This flow indicates that transfer objection withdrawal has been accepted by the *Registry* and the transfer objection has been withdrawn.

8.1.7.4.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>55000009</RequestID>
    <ChangeStatusCode>REQ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0001</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000009</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

```
</ChangeRequest>
<Objection>
  <Participant>ZLN</Participant>
  <ObjectionID>65000009</ObjectionID>
  <ObjectionAction>Withdrawn</ObjectionAction>
  <ObjectionData>
    <InitiatingRequestID>55000009</InitiatingRequestID>
    <Role>NO</Role>
    <ObjectionCode>DECLINED</ObjectionCode>
  </ObjectionData>
  <ObjectionDate>2004-03-03</ObjectionDate>
</Objection>
</CATSNotification>
```

8.1.7.5 Data flow Definition: Transfer Objection Withdrawal Notification to Objecting Participant (TFR-WOB-NOTF-OP)

This is the notification to the participant that lodged the initiating objection. This flow indicates that transfer objection withdrawal has been accepted by the *Registry* and the transfer objection has been withdrawn. Note that a user can only object when they are the ROLR

8.1.7.5.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>55000009</RequestID>
    <ChangeStatusCode>REQ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0001</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000009</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

```
        </NMIStandingData>
    </ChangeData>
</ChangeRequest>
<Objection>
    <Participant>ZLN</Participant>
    <ObjectionID>65000009</ObjectionID>
    <ObjectionAction>Withdrawn</ObjectionAction>
    <ObjectionData>
        <InitiatingRequestID>55000009</InitiatingRequestID>
        <Role>NO</Role>
        <ObjectionCode>DECLINED</ObjectionCode>
    </ObjectionData>
    <ObjectionDate>2004-03-03</ObjectionDate>
</Objection>
</CATSNotification>
```

8.1.7.6 Data Flow Definition: Error Correction Notification For Erroneous Transfer to Network Operator (ECNET-NOTF-NO)

This is notification to the network operator to identify that the particular error correction has been requested.

8.1.7.6.1 AseXML Example Transaction

```
<CATSNotification version="r29">
    <Role>NO</Role>
    <RoleStatus>C</RoleStatus>
    <ChangeRequest>
        <Participant>ZLS</Participant>
        <RequestID>175000001</RequestID>
        <ChangeStatusCode>REQ</ChangeStatusCode>
        <ChangeData>
            <ChangeReasonCode>0003</ChangeReasonCode>
            <ProposedDate>2004-06-07</ProposedDate>
            <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
                <NMI checksum="7">5000000001</NMI>
            </NMIStandingData>
        </ChangeData>
    </ChangeRequest>
</CATSNotification>
```

```
        </NMIStandingData>  
    </ChangeData>  
</ChangeRequest>  
</CATSNotification>
```

8.1.7.7 Data Flow Definition: Error Correction Notification For Erroneous Transfer to Current User (ECNET-NOTF-CU)

This is notification to the current user to identify that the particular error correction has been requested.

8.1.7.7.1 AseXML Example Transaction

```
<CATSNotification version="r29">  
  <Role>USER</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant xsi:nil="true" />  
    <RequestID>175000001</RequestID>  
    <ChangeStatusCode>REQ</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0003</ChangeReasonCode>  
      <ProposedDate>2004-06-07</ProposedDate>  
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="7">5000000001</NMI>  
      </NMIStandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```


8.1.7.8 Dataflow Definition: Error Correction Objection Withdrawal Notification to Objecting Participant (ECNET-WOB-NOTF-OP)

This is a notification to the participant that has requested the withdrawal of a previously lodged objection that their request was valid and will be processed.

8.1.7.8.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>REQ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMISstandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMISstandingData>
    </ChangeData>
  </ChangeRequest>
  <Objection>
    <Participant>ZLN</Participant>
    <ObjectionID>1850000012</ObjectionID>
    <ObjectionAction>Withdrawn</ObjectionAction>
    <ObjectionData>
      <InitiatingRequestID>175000001</InitiatingRequestID>
      <Role>NO</Role>
      <ObjectionCode>DECLINED</ObjectionCode>
    </ObjectionData>
    <ObjectionDate>2004-06-24</ObjectionDate>
  </Objection>
</CATSNotification>
```

</CATSNotification>

8.1.7.9 Data Flow Definition: Error Correction Objection Withdrawal Notification to Previous User (ECNET-WOB-NOTF-PU)

To be consistent with the *RMP* this section refers to the previous user, however, for the purposes of the correction of transfer a previous user can be considered to be the same as the incoming user (as per a transfer process).

This is a notification to the current user to identify that there is a withdrawal of a previously lodged objection in progress.

8.1.7.9.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>REQ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
  <Objection>
    <Participant>ZLN</Participant>
    <ObjectionID>1850000012</ObjectionID>
    <ObjectionAction>Withdrawn</ObjectionAction>
    <ObjectionData>
```

```
<InitiatingRequestID>175000001</InitiatingRequestID>  
<Role>NO</Role>  
<ObjectionCode>DECLINED</ObjectionCode>  
</ObjectionData>  
<ObjectionDate>2004-06-24</ObjectionDate>  
</Objection>  
</CATSNotification>
```

8.1.8 CATSNotification Transaction – “PENDING” Variant

8.1.8.1 Physical Transaction

CATSNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) “USER” – User “NO” – Network operator	Mandatory	The role assigned to the recipient. Either: <ul style="list-style-type: none"> • “USER” or “NO” to support TFR-PEND-MI-NOTF • “USER” or “NO” to support TFR-PEND-NOTF • 	1..1	Role	xsd:string xsd:maxLength="4"
RoleStatus	String(Enum) “N” = New (incoming) “C” = Current	Mandatory	For TFR-PEND-MI-NOTF, TFR-PEND-NOTF and ECNET-PEND-NOTF - “C” for the Network operator and Current User and “N” for the incoming user.	1..1	RoleStatus	Enumerated list of xsd:string “N”,“C”

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Participant	String (10)	Mandatory	If 'Role' = "NO" then: <ul style="list-style-type: none"> Contains the GBO Id of the incoming user that initiated the transfer when sent to the Network Operator. If 'Role' = "USER" or "ROLR" then: <ul style="list-style-type: none"> (1) contains the GBO Id of the current user when sent to the incoming user that initiated the transfer (2) contains the GBO Id of the incoming user that initiated the transfer when sent to the current user 	1..1	ChangeRequest/Participant	xsd:string
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request or error correction	1..1	ChangeRequest/RequestID	xsd:positiveIntegermaxInclusive="9999999999"
ChangeStatusCode	String (4) REQ = Requested PEN = Pending OBJ = Objection COM = Completed CAN = Cancelled [SA ONLY CODES] RCA = RoLR Cancelled RCO = RoLR Completed	Mandatory	For TFR-PEND-MI-NOTF, TFR-PEND-NOTF and ECNET-PEND-NOTF: Current status of the Change Request. In this case, "PEN"	1..1	ChangeRequest/ChangeStatusCode	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	One of: <ul style="list-style-type: none"> “0002” (move in) to support TFR-PEND-MI-NOTF “0001” to support TFR-PEND-NOTF “0003” to support ECNET-PEND-NOTF 	1..1	ChangeRequest/ChangeData/ChangeReasonCode	xsd:string xsd:maxLength="4"
ProposedDate	Date (10) Cyy-mm-dd	Mandatory	For TFR-PEND-NOTF and TFR-PEND-NOTF: The Earliest Change Date supplied in the original transfer request or error correction. For ECNET-PEND-NOTF: The transfer date of the original transfer transaction to be corrected.	1..1	ChangeRequest/ChangeData/ProposedDate	xsd:date
NMI	String(10)	Mandatory	For TFR-PEND-NOTF and TFR-PEND-NOTF: The MIRN in the original Change Request For ECNET-PEND-NOTF: The MIRN in the original transfer transaction to be corrected.	0..1	ChangeRequest/ChangeData/NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer" minInclusive="0" maxInclusive="9"

8.1.8.2 Data flow Definition: Transfer Pending Notification for move-in (TFR-PEND-MI-NOTF)

This flow is a notification to all the interested parties (incoming user, current user, and network operator) to communicate that a transfer request for a move in is pending.

8.1.8.2.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true" />
    <RequestID>55000010</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Incoming *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>55000010</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

```
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">  
  <Role>NO</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant>ZGL</Participant>  
    <RequestID>55000010</RequestID>  
    <ChangeStatusCode>PEN</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0002</ChangeReasonCode>  
      <ProposedDate>2004-03-10</ProposedDate>  
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="8">5000000010</NMI>  
      </NMIStandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```


8.1.8.3 Data flow Definition: Transfer Request Pending Notification (TFR-PEND-NOTF)

This flow is a notification to all the interested parties (incoming user, current user, and network operator) to communicate that a transfer request that was **not** for a move in is pending.

8.1.8.3.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true" />
    <RequestID>55000001</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Incoming *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>55000001</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
```

```
<ChangeReasonCode>0002</ChangeReasonCode>
<ProposedDate>2004-06-07</ProposedDate>
<NMIStandingData xsi:type="ase:GasStandingData" version="r40">
  <NMI checksum="7">5000000001</NMI>
</NMIStandingData>
</ChangeData>
</ChangeRequest>
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>55000001</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

8.1.8.4 Data flow Definition: Error Correction Request Pending Notification (ECNET-PEND-NOTF)

This flow is a notification to all the interested parties (incoming user, current user, and network operator) to communicate that a error correction request for an erroneous transfer is pending.

8.1.8.4.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true" />
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Previous *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>PEN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2004-06-07</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

```
    </ChangeRequest>  
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">  
  <Role>NO</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant>ZLS</Participant>  
    <RequestID>175000001</RequestID>  
    <ChangeStatusCode>PEN</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0003</ChangeReasonCode>  
      <ProposedDate>2004-06-07</ProposedDate>  
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="7">5000000001</NMI>  
      </NMIStandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```

8.1.9 CATSNotification Transaction – “OBJECTION” Variant

8.1.9.1 Physical Transaction

NOTE: The Date and Time of Processing in the *Registry* shall be stored in the transactionDate attribute of the transaction.

CATSNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) “USER” – User “NO” - Network operator	Mandatory	The role assigned to the recipient. Either: <ul style="list-style-type: none"> • “USER” to support TFR-OBJ-NOTF-IU • “USER” to support ECNET-OBJ-NOTF-PU 	1..1	Role	xsd:string xsd:maxLength =“4”
RoleStatus	String(Enum) “N” = New (incoming) “C” = Current	Mandatory	The status of this role. Either: <ul style="list-style-type: none"> • “N” to support TFR-OBJ-NOTF-IU • “N” to support ECNET-OBJ-NOTF-PU (Note here that this is the previous user, but for the purposes of this transaction this user can be considered to be incoming, or “N”ew.) 	1..1	RoleStatus	Enumerated list of xsd:string "N", "C".

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Participant	String (10)	Mandatory	For TFR-OBJ-NOTF-IU, this will contain the GBO ID of the participant that initiated the Transfer. For ECNET-OBJ-NOTF-PU, this will contain the GBO ID of the participant that initiated the error correction.	1..1	ChangeRequest/Participant	xsd:string
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request (for TFR-OBJ-NOTF-IU) or Error Correction (for ECNET-OBJ-NOTF-PU)	1..1	ChangeRequest/RequestID	xsd:positiveIntegermaxInclusive="9999999999"
ChangeStatusCode	String (4) REQ = Requested PEN = Pending OBJ = Objection COM = Completed CAN = Cancelled [SA ONLY CODES] RCA = RoLR Cancelled RCO = RoLR Completed	Mandatory	This is the current state of the transfer request. In this case, it will be "OBJ".	1..1	ChangeRequest/ChangeStatusCode	xsd:string xsd:maxLength="4"
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	For TFR-OBJ-NOTF-IU, since there can be no objections for a move-in this data element must take a value of "0001" which will be the value from the original transfer request. For ECNET-OBJ-NOTF-PU, this will be populated with "0003"	1..1	ChangeRequest/ChangeData/ChangeReasonCode	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ProposedDate	Date (10) ccyy-mm-dd	Mandatory	This is the earliest change date from the original transfer request or the date of the original transfer for error correction.	1..1	ChangeRequest/ChangeData/ProposedDate	xsd:date
InitiatingRequestID	Numeric(10)	Not Required			ChangeRequest/ChangeData/InitiatingRequestID	xsd:positiveIntegermaxInclusive="999999999"
NMI	String(10)	Mandatory	From the Change Request	0..1	ChangeRequest/ChangeData/NMI	xsd:stringlength="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer"minInclusive="0"maxInclusive="9"
Participant	String (10)	Mandatory	The GBO ID of the objecting participant.	1..1	Objection/Participant	xsd:string
ObjectionID	Numeric (10)	Mandatory	Unique ID assigned by AEMO to the Objection Request	1..1	Objection/ObjectionID	xsd:positiveIntegermaxInclusive="999999999"
ObjectingAction	String (Enum) "Raised" or "Withdrawn"	Mandatory	In this case "Raised"	1..1	Objection/ObjectionAction	enumerated list of xsd:stringvalues "R"aised", "W"ithdrawn"
InitiatingRequestID	Numeric (10)	Mandatory	This is a copy of RequestID included above.	1..1	Objection/ObjectionData/InitiatingRequestID	xsd:positiveIntegermaxInclusive="999999999"
Role	String (4) Values as above	Mandatory	Role of the objecting participant: <ul style="list-style-type: none"> • "NO" or "ROLR" to support TFR-OBJ-NOTF-IU • ""NO" or "CU" to support ECNET-OBJ-NOTF-PU 	1..1	Objection/ObjectionData/Role	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionCode	String (8) "DECLINED"	Mandatory	Valid objection reason code For TFR-OBJ-NOTF-IU, "DECLINED" = No Haulage Contract is in place. For ECNET-OBJ-NOTF- PU, "DECLINED" = The original delivery point transaction is believed to be correct/ the correction notice contains incorrect information	1..1	Objection/ObjectionDa ta/ObjectionCode	xsd:string xsd:length ="8"
ObjectionDate	Date (10)	Mandatory	The date that the objection was processed by the GRMS.	1..1	Objection/ObjectionDa te	xsd:date

8.1.9.2 Data flow Definition: Transfer Request Objection Notification to Incoming User (TFR-OBJ-NOTF-IU)

This is the notification to the incoming user that lodged the initiating transfer. This flow indicates that a transfer objection has been accepted by the *Registry*.

8.1.9.2.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>550000072</RequestID>
    <ChangeStatusCode>OBJ</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0001</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```



```
<NMIStandingData xsi:type="ase:GasStandingData" version="r40">
  <NMI checksum="2">5000000007</NMI>
</NMIStandingData>
</ChangeData>
</ChangeRequest>
<Objection>
  <Participant>ZLN</Participant>
  <ObjectionID>650000072</ObjectionID>
  <ObjectionAction>Raised</ObjectionAction>
  <ObjectionData>
    <InitiatingRequestID>550000072</InitiatingRequestID>
    <Role>NO</Role>
    <ObjectionCode>DECLINED</ObjectionCode>
  </ObjectionData>
  <ObjectionDate>2004-02-27</ObjectionDate>
</Objection>
</CATSNotification>
```

8.1.9.3 Data Flow Definition: Error Correction Objection Notification to previous user (ECNET-OBJ-NOTF-PU)

To be consistent with the *RMP* this section refers to the previous user, however, for the purposes of the correction of transfer a previous user can be considered to be the same as the incoming user (as per a transfer process).

This is a notification to the current user to identify that an objection has been received and is being processed.

8.1.9.3.1 AseXML Example Transaction

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
```

```
<RequestID>175000001</RequestID>
<ChangeStatusCode>OBJ</ChangeStatusCode>
<ChangeData>
  <ChangeReasonCode>0003</ChangeReasonCode>
  <ProposedDate>2004-06-07</ProposedDate>
  <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
    <NMI checksum="7">5000000001</NMI>
  </NMIStandingData>
</ChangeData>
</ChangeRequest>
<Objection>
  <Participant>ZLN</Participant>
  <ObjectionID>1850000012</ObjectionID>
  <ObjectionAction>Raised</ObjectionAction>
  <ObjectionData>
    <InitiatingRequestID>175000001</InitiatingRequestID>
    <Role>NO</Role>
    <ObjectionCode>DECLINED</ObjectionCode>
  </ObjectionData>
  <ObjectionDate>2004-06-24</ObjectionDate>
</Objection>
</CATSNotification>
```

8.1.10 CATSNotification Transaction – “CANCELLED” Variant

8.1.10.1 Physical Transaction

CATSNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) “USER” – User “NO” - Network operator	Mandatory	The role assigned to the recipient, either “USER” or “NO”	1..1	Role	xsd:string xsd:maxLength="4"
RoleStatus	String(Enum) “N” = New (incoming) “C” = Current	Mandatory	For TFR-CAN-NOTF, “C” for current roles and “N” for the incoming user. For ECNET-CAN-NOTF, “C” for current roles and for the previous user, this will be “N”, since this previous user can be considered to be the incoming user in this process.	1..1	RoleStatus	Enumerated list of xsd:string "N", "C".
Participant	String (10)	Optional	This will contain the GBO ID of the participant that initiated the Transfer. For TFR-CAN-NOTF and ECNET-CAN-NOTF , When sent to the current user this value is simply populated with xsi:nil = “true”	1..1	ChangeRequest/Participant	xsd:string
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer or error correction	1..1	ChangeRequest/RequestID	xsd:positiveIntegermaxInclusive="9999999999"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ChangeStatusCode	String (4) REQ = Requested PEN = Pending OBJ = Objection COM = Completed CAN = Cancelled [SA ONLY CODES] RCA = RoLR Cancelled RCO = RoLR Completed	Mandatory	The value is "CAN" For cancelled transactions in a RoLR event, the allowable value is "RCA".	1..1	ChangeRequest/ChangeStatusCode	xsd:string xsd:maxLength="4"
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	This element will take the value from the original transfer request. Either: <ul style="list-style-type: none"> • "0001" or "0002" (for a move-in) to support TFR-CAN-NOTF • "0003" to support ECNET-CAN-NOTF 	1..1	ChangeRequest/ChangeData/ChangeReasonCode	xsd:string xsd:maxLength="4"
ProposedDate	Date (10) Cyy-mm-dd	Mandatory	The earliest Change Date from the change request or that date that the transfer originally took place for error correction	1..1	ChangeRequest/ChangeData/ProposedDate	xsd:date
NMI	String(10)	Mandatory	The MIRN	0..1	ChangeRequest/ChangeData/NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer" minInclusive="0"maxInclusive="9"

8.1.10.2 Data flow Definition: Transfer Cancellation Notification (TFR-CAN-NOTF)

This is a notification to all interested parties (incoming user, current user and network operator) that the specified transfer request has been cancelled. That is, either

- a transfer objection was received but no objection withdrawal followed within the allowable withdrawal period. This notification provides the reason for the cancellation.
- No actual value was received within the required 7 business days – for the move-in
- No actual value was received within the allowable period – for the non move-in.

8.1.10.2.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">  
  <Role>USER</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant xsi:nil="true" />  
    <RequestID>175000010</RequestID>  
    <ChangeStatusCode>CAN</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0002</ChangeReasonCode>  
      <ProposedDate>2004-03-10</ProposedDate>  
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="8">5000000010</NMI>  
      </NMIStandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```

To the Incoming *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>175000010</RequestID>
    <ChangeStatusCode>CAN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZGL</Participant>
    <RequestID>175000010</RequestID>
    <ChangeStatusCode>CAN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0002</ChangeReasonCode>
      <ProposedDate>2004-03-10</ProposedDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

8.1.10.3 Data Flow Definition: Error Correction Cancellation Notification (ECNET-CAN-NOTF)

To be consistent with the *RMP* this section refers to the previous user, however, for the purposes of the correction of transfer a previous user can be considered to be the same as the incoming user (as per a transfer process).

This is a notification to the current user, previous user and network operator to identify that an error correction has been cancelled. This would be because there was an objection, but no objection withdrawal received within the required period.

8.1.10.3.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true"/>
    <RequestID>11036</RequestID>
    <ChangeStatusCode>CAN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2003-11-23</ProposedDate>
      <NMISstandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMISstandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Previous *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
```

```
<RoleStatus>N</RoleStatus>
<ChangeRequest>
  <Participant>XGL</Participant>
  <RequestID>11036</RequestID>
  <ChangeStatusCode>CAN</ChangeStatusCode>
  <ChangeData>
    <ChangeReasonCode>0003</ChangeReasonCode>
    <ProposedDate>2003-11-23</ProposedDate>
    <NMISstandingData xsi:type="ase:GasStandingData" version="r40">
      <NMI checksum="8">5000000010</NMI>
    </NMISstandingData>
  </ChangeData>
</ChangeRequest>
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>XGL</Participant>
    <RequestID>11036</RequestID>
    <ChangeStatusCode>CAN</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ProposedDate>2003-11-23</ProposedDate>
      <NMISstandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="8">5000000010</NMI>
      </NMISstandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```


8.1.11 CATSNotification Transaction – “COMPLETED” Variant

8.1.11.1 Physical Transaction

CATSNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Role	String(4) “USER” – User “NO” - Network operator	Mandatory	The role assigned to the recipient. In this case either “USER” or “NO”	1..1	Role	xsd:string xsd:maxLength="4"
RoleStatus	String(Enum) “N” = New (incoming) “C” = Current	Mandatory	For TFR-CONF-NOTF, “C” for the Network operator and Current User and “N” for the incoming user. For ECNET-CONF-NOTF, “C” for the Network operator and Current User and for the Previous user “N”, since this user can be considered to be the incoming user in this process.	1..1	RoleStatus	Enumerated list of xsd:string "N", "C".

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Participant	String (10)	Mandatory	For TFR-CONF-NOTF and ECNET-CONF-NOTF: <ul style="list-style-type: none"> contains the GBO Id of the incoming user that initiated the transfer when sent to the Network Operator. (1) contains the <u>GBO Id of the current user when sent to the incoming user that initiated the transfer</u> (2) contains the <u>GBO Id of the incoming user that initiated the transfer when sent to the current user</u> 	1..1	ChangeRequest/Participant	xsd:string
RequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request or error correction	1..1	ChangeRequest/RequestID	xsd:positiveIntegermaxInclusive="999999999"
ChangeStatusCode	String (4) REQ = Requested PEN = Pending OBJ = Objection COM = Completed CAN = Cancelled [SA ONLY CODES] <u>RCA = RoLR Cancelled</u> <u>RCO = RoLR Completed</u>	Mandatory	Current status of the Change Request. In this case, "COM" For accelerated transactions in a RoLR event, the allowable value is "RCO".	1..1	ChangeRequest/ChangeStatusCode	xsd:string xsd:maxLength="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ChangeReasonCode	String (4) 0001 = Prospective transfer, in-situ 0002 = Prospective transfer, move in 0003 = Correction of Transfer	Mandatory	Either: <ul style="list-style-type: none"> “0001” or “0002” (for a move-in) to support TFR-CONF-NOTF “0003” to support ECNET-CONF-NOTF It's value will be the same ChangeReasonCode from the original transfer request.	1..1	ChangeRequest/ChangeData/ChangeReasonCode	xsd:string xsd:maxLength="4"
ActualChangeDate	Date (10) ccyy-mm-dd	Mandatory for TFR-CONF-NOTF Mandatory for ECNET-CONF-NOTF	For a transfer, this is the date when the transfer completes. This is the meter read date provided by the network operator. For error correction, this is the date when the transfer which is being corrected was completed.	1..1	ChangeRequest/ChangeData/ActualChangeDate	xsd:date
NMI	String(10)	Mandatory	The MIRN in the original Change Request	0..1	ChangeRequest/ChangeData/NMI	xsd:stringlength="10"
Checksum	Integer(1)	Mandatory	An attribute of NMI	use="optional"	@checksum	xsd:integer"minInclusive="0"maxInclusive="9"

8.1.11.2 Data flow Definition: Transfer Confirmation Notification (TFR-CONF-NOTF)

This flow is a notification to all the interested parties (incoming user, current user, and network operator) to communicate that an actual value has been received for the delivery point to be transferred. This confirms the transfer.

8.1.11.2.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">  
  <Role>USER</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant xsi:nil="true"/>  
    <RequestID>11036</RequestID>  
    <ChangeStatusCode>COM</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0002</ChangeReasonCode>  
      <ActualChangeDate>2003-11-25</ActualChangeDate>  
      <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="8">5000000010</NMI>  
      </NMISTandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```

To the Incoming *User*:

```
<CATSNotification version="r29">  
  <Role>USER</Role>  
  <RoleStatus>N</RoleStatus>  
  <ChangeRequest>  
    <Participant>ZGL</Participant>  
    <RequestID>1750000101</RequestID>  
    <ChangeStatusCode>COM</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0002</ChangeReasonCode>  
      <ActualChangeDate>2004-03-01</ActualChangeDate>  
      <NMISTandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="8">5000000010</NMI>  
      </NMISTandingData>  
    </ChangeData>  
</CATSNotification>
```

```
</ChangeRequest>  
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">  
  <Role>NO</Role>  
  <RoleStatus>C</RoleStatus>  
  <ChangeRequest>  
    <Participant>ZGL</Participant>  
    <RequestID>55000001</RequestID>  
    <ChangeStatusCode>COM</ChangeStatusCode>  
    <ChangeData>  
      <ChangeReasonCode>0002</ChangeReasonCode>  
      <ActualChangeDate>2004-06-07</ActualChangeDate>  
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">  
        <NMI checksum="7">5000000001</NMI>  
      </NMIStandingData>  
    </ChangeData>  
  </ChangeRequest>  
</CATSNotification>
```

8.1.11.3 Data Flow Definition: Error Correction Notice Confirmation Notification (ECNET-CONF-NOTF)

To be consistent with the *RMP* this section refers to the previous user, however, for the purposes of the correction of transfer a previous user can be considered to be the same as the incoming user (as per a transfer process).

This is a notification to the current user, network operator and previous user that the requested error correction is complete.

8.1.11.3.1 AseXML Example Transaction

To the Current *User*:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant xsi:nil="true" />
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>COM</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ActualChangeDate>2004-06-07</ActualChangeDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Previous User:

```
<CATSNotification version="r29">
  <Role>USER</Role>
  <RoleStatus>N</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>COM</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ActualChangeDate>2004-06-07</ActualChangeDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

To the Network Operator:

```
<CATSNotification version="r29">
  <Role>NO</Role>
  <RoleStatus>C</RoleStatus>
  <ChangeRequest>
    <Participant>ZLS</Participant>
    <RequestID>175000001</RequestID>
    <ChangeStatusCode>COM</ChangeStatusCode>
    <ChangeData>
      <ChangeReasonCode>0003</ChangeReasonCode>
      <ActualChangeDate>2004-06-07</ActualChangeDate>
      <NMIStandingData xsi:type="ase:GasStandingData" version="r40">
        <NMI checksum="7">5000000001</NMI>
      </NMIStandingData>
    </ChangeData>
  </ChangeRequest>
</CATSNotification>
```

8.1.12 CATSObjectionRequest Transaction

8.1.12.1 Physical Transaction

CATSObjectionRequest

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
InitiatingRequestID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Transfer Request or error correction that is being objected to.	1..1	InitiatingRequestID	xsd:positiveIntegermaxInclusive="9999999999"
Role	String(4) "USER" – User "NO" – Network operator "ROLR" – Retailer of Last Resort	Mandatory	The Role of the objecting party. Either: <ul style="list-style-type: none"> • "NO" to support TFR-OBJ-NO • "ROLR" to support TFR-OBJ-ROLR • "NO" to support ECNET-OBJ-NO • "USER" to support ECNET-OBJ-CU 	1..1	Role	xsd:string xsd:max"Length="4"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionCode	String (8) "DECLINED"	Mandatory	Must be a valid objection reason code. "DECLINED" = No Haulage Contract is in place for TFR-OBJ-NO "DECLINED" = The ROLR fee has not been paid for TFR-OBJ-ROLR "DECLINED" = The original delivery point transaction is believed to be correct/ the correction notice contains incorrect information for ECNET-OBJ-CU and ECNET-OBJ-NO	1..1	ObjectionCode	Xsd:string xsd:length ="8"

8.1.12.2 Data flow Definition: Transfer Objection by Network Operator (TFR-OBJ-NO)

This is the objection that may be submitted by the network operator, provided that the transfer request is not a move in. It may only be an objection on the grounds that the incoming user has not entered into a haulage contract with the network operator.

8.1.12.2.1 AseXML Example Transaction

```
<CATSObjectionRequest version="r29">
  <InitiatingRequestID>175000001</InitiatingRequestID>
  <Role>NO</Role>
  <ObjectionCode>DECLINED</ObjectionCode>
</CATSObjectionRequest>
```

8.1.12.2.2 Event Codes

Event Code Number
202,3007,3013,3016,3018,3028,3030,3031,3032

Note: In all cases the severity of each event will be “Error”.

8.1.12.3 Data flow Definition: Transfer Request Objection by ROLR (TFR-OBJ-ROLR)

This flow is only applicable in Western Australia. It is the objection by a ROLR for a non move in on the grounds that the ROLR fee has not been paid by the transferring customer.

8.1.12.3.1 AseXML Example Transaction

```
<CATSObjectionRequest version="r29">  
  <InitiatingRequestID>55000008</InitiatingRequestID>  
  <Role>ROLR</Role>  
  <ObjectionCode>DECLINED</ObjectionCode>  
</CATSObjectionRequest>
```

8.1.12.3.2 Event Codes

Event Code Number
202,3007,3013,3016,3018,3028,3030,303,3032

Note: In all cases the severity of each event will be “Error”.

8.1.12.4 Data Flow Definition: Error Correction Notice For Erroneous Transfer Objection by Network Operator (ECNET-OBJ-NO)

This is an objection notification by the network operator to identify the objection and the reason.

8.1.12.4.1 AseXML Example Transaction

```
<CATSObjectionRequest version="r29">  
  <InitiatingRequestID>175000001</InitiatingRequestID>  
  <Role>NO</Role>  
  <ObjectionCode>DECLINED</ObjectionCode>  
</CATSObjectionRequest>
```

8.1.12.4.2 Event Codes

Event Code Number
202,3007,3013,3016,3018,3028,3030,3031,3032

Note: In all cases the severity of each event will be “Error”.

8.1.12.5

8.1.12.6 Data Flow Definition: Error Correction Objection by Current User (ECNET-OBJ-CU)

This is an objection notification by the current user to identify the objection and the objection reason.

8.1.12.6.1 AseXML Example Transaction

```
<CATSObjectionRequest version="r29">  
  <InitiatingRequestID>1750000022</InitiatingRequestID>  
  <Role>USER</Role>  
  <ObjectionCode>DECLINED</ObjectionCode>  
</CATSObjectionRequest>
```

8.1.12.6.2 Event Codes

Event Code Number
202,3007,3013,3016,3018,3028,3030,3031,3032

Note: In all cases the severity of each event will be “Error”.

8.1.13 CATSObjectionResponse Transaction

8.1.13.1 Physical Transaction

NOTE: The Date and Time of Processing in the *Registry* shall be stored in the transactionDate attribute of the transaction.

NOTE: The initiatingTransactionID allows a participant to identify the associated CATSObjectionRequest.

CATSObjectionResponse

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionID	Numeric (10)	Mandatory	The unique ID assigned by AEMO to the Objection	1..1	ObjectionID	xsd:positiveIntegermaxInclusive="9999999999"
Event	Numeric (10,0)	Mandatory	"0": A value of zero will be returned to indicate that the objection has been accepted.	1..n	Event/Code	xsd:nonNegativeInteger
Class	Enumerated String	Mandatory	"Message" Note: Although optional in the schema, must be set to avoid default value being used	use="optional"	@class	xsd:string
Severity	Enumerated String	Mandatory	"Information" Note: Although optional in the schema, must be set to avoid default value being used	use="optional"	@severity	xsd:string

8.1.13.2 Data flow Definition: Transfer Objection Notification to Objecting Participant (TFR-OBJ-NOTF-OP)

This is the notification to the participant that lodged the initiating objection. This flow indicates that transfer objection has been accepted by the *Registry*.

8.1.13.2.1 AseXML Example Transaction

```
<CATSObjectionResponse version="r29">  
  <ObjectionID>11035</ObjectionID>  
  <Event severity="Information" class="Message">  
    <Code>0</Code>  
  </Event>  
</CATSObjectionResponse>
```

8.1.13.3 Data Flow Definition: Error Correction Objection Notification to objecting participant (ECNET-OBJ-NOTF-OP)

This is a notification to the objecting participant to identify that their objection has been received and is being processed.

8.1.13.3.1 AseXML Example Transaction

```
<CATSObjectionResponse version="r29">  
  <ObjectionID>11037</ObjectionID>  
  <Event severity="Information" class="Message">  
    <Code>0</Code>  
  </Event>  
</CATSObjectionResponse>
```

8.1.14 CATSObjectionWithdrawal Transaction

8.1.14.1 Physical Transaction

CATSObjectionWithdrawal

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ObjectionID	Numeric (10)	Mandatory	The ID assigned by AEMO to the Objection Request	1..1	ObjectionID	xsd:positiveIntegermaxInclusive="9999999999"
InitiatingRequestID	Numeric (10)	Mandatory	The ID assigned by AEMO to the Transfer Request or error correction	1..1	InitiatingRequestID	xsd:positiveIntegermaxInclusive="9999999999"
Role	String(4) "USER" – User "NO" – Network operator "ROLR" – Retailer of Last Resort	Mandatory	Role initiating the withdrawal: Either: <ul style="list-style-type: none"> "NO" or "USER" for ECNET-WOB "NO", or "ROLR" for TFR-WOBJ 	1..1	Role	xsd:string xsd:maxLength="4"
ObjectionCode	String (8) "DECLINED"	Mandatory	A valid objection reason. Either: <ul style="list-style-type: none"> "DECLINED" = The original delivery point transaction is believed to be correct/ the correction notice contains incorrect information for ECNET-WOB "DECLINED" = No Haulage Contract is in place for TFR-WOBJ 	1..1	ObjectionCode	Xsd:string xsd:length="8"

8.1.14.2 Data Flow Definition: Error Correction Objection Withdrawal Notice (ECNET-WOB)

This is a notification from the network operator or the current user to identify that their request withdraw a previous objection.

8.1.14.2.1 AseXML Example Transaction

```
<CATSObjectionWithdrawal version="r29">  
  <ObjectionID>1850000021</ObjectionID>  
  <InitiatingRequestID>1750000022</InitiatingRequestID>  
  <Role>NO</Role>  
  <ObjectionCode>DECLINED</ObjectionCode>  
</CATSObjectionWithdrawal>
```

8.1.14.2.2 Event Codes

Event Code Number
202,3007,3018,3027,3029,3031-3033,3407

Note: In all cases the severity of each event will be “Error”.

8.1.14.3 Data flow Definition: Transfer Objection Withdrawal (TFR-WOBJ)

A flow to AEMO to indicate the a participant would like to withdraw an objection that the participant had lodged previously.

8.1.14.3.1 AseXML Example Transaction

```
<CATSObjectionWithdrawal version="r29">  
  <ObjectionID>65000006</ObjectionID>  
  <InitiatingRequestID>55000006</InitiatingRequestID>  
  <Role>NO</Role>  
  <ObjectionCode>DECLINED</ObjectionCode>  
</CATSObjectionWithdrawal>
```


8.1.14.3.2 Event Codes

Event Code Number
202,3007, 3018, 3027-3029,3031-3033,3407

Note: In all cases the severity of each event will be “Error”.

8.1.15 CATSChangeAlert Transaction

8.1.15.1 Physical Transaction

NOTE: The Current User GBO ID will be identified in the message header.

CATSChangeAlert

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
InitiatingRequestID	Numeric (10)	Mandatory	The ID assigned by AEMO to the associated Transfer Request	1..1	InitiatingRequestID	xsd:positiveIntegermaxInclusive="999999999"
Role	String(4) "USER" – User "NO" – Network operator "ROLR" – Retailer of Last Resort	Mandatory	Per the party that raised the CATSChangeAlert. (Currently support 'USER')	1..1	Role	xsd:string xsd:maxLength="4"
RoleStatus	String(10)	Mandatory	Per the party that raised the CATSChangeAlert. (Currently support 'C')	1..1	RoleStatus	xsd:string length="10"
Participant	String (10)	Mandatory	The GBO Id of the user initiating the transaction	1..1	Participant	xsd:string
Code	Numeric (10,0)	Mandatory if Event element is present	The event code which is to be passed from the current user to the incoming user via AEMO. For CATSChangeAlert transactions which are lodged with GRMS, the Event element is mandatory.	1..n	Event/Code	xsd:nonNegativeInteger
Severity	Enumerated String	Mandatory if Event element is present (and must not be 'Fatal')	The severity element of the event which is to be passed from the current user to the incoming user via AEMO.	use="optional"	@severity	xsd:string

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Class	Enumerated String	Optional	The Class element of the event which is to be passed from the current user to the incoming user via AEMO.	use="optional"	@class	xsd:string
Explanation	String	Optional	The Explanation element of the event containing information which is to be passed from the current user to the incoming user via AEMO. Note that this will be limited to <u>250 characters</u> in GRMS.	1..1	Event/Explanation	xsd:string

8.1.15.2 Data flow Definition: Transfer Change Alert from Current User (TFR-ALERT-CU)

A transfer change alert is a notice from a current user to the *Registry* in order to pass information from the current user to the incoming user (via AEMO) for a delivery point, whilst a transfer for that delivery point is in progress.

8.1.15.2.1 AseXML Example

```
<CATSChangeAlert version="r29">
  <InitiatingRequestID>11000</InitiatingRequestID>
  <Role>USER</Role>
  <RoleStatus>C</RoleStatus>
  <Participant>XLN</Participant>
  <Event severity="Information" class="Message">
    <Code>3333</Code>
    <Explanation>This is an event explanation</Explanation>
  </Event>
</CATSChangeAlert>
```

8.1.15.2.2 Event Codes

Event Code Number
201, 202, 3007, 3016, 3018, 3031, 3407

Note: In all cases the severity of each event will be “Error”.

Note: Multiple event codes may be sent where the transaction is rejected by GRMS following failure of more than one validation step.

8.1.15.3 Data Flow Definition: Transfer Change Alert to Incoming User (TFR-ALERT-IU)

A transfer change alert is a notice from the *Registry* to the incoming user which passes on information from the current user for a delivery point, whilst a transfer for that delivery point is in progress.

8.1.15.3.1 AseXML Example

```
<CATSChangeAlert version="r29">  
  <InitiatingRequestID>11000</InitiatingRequestID>  
  <Role>USER</Role>  
  <RoleStatus>C</RoleStatus>  
  <Participant>XLN</Participant>  
  <Event severity="Information" class="Message">  
    <Code>3333</Code>  
    <Explanation>This is an event explanation</Explanation>  
  </Event>  
</CATSChangeAlert>
```

8.2 Deliver Standing Data

8.2.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
<i>NMISstandingDataUpdateNotification/SingleNMISstandingData (new transaction)</i>		DSD	The Registry	Current user/ Network Operator	aseXML	MDMT	53 69	2,3.1	53 69

8.2.2 Code Summary

This table is a complete list of those codes used to uniquely identify each particular flow.

Identifier	Data Flow Name
DSD	Deliver Standing Data

8.2.3 NMISstandingDataUpdateNotification/SingleNMISstandingData Transaction

8.2.3.1 Physical Transaction

NOTE: A RoleAssignment will be provided for each of the ROLR, Network Operator and Current User.

NOTE: The gas zone will be encoded into the HeatingValuezone(string(3) – subnetwork and heating value zone) and TransmissionZone(integer(2) – network operator and licence area) (as per RMP appendix 1)

NMISstandingDataUpdateNotification/SingleNMISstandingData:

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
NMI	String(10)	Mandatory	The MIRN	1..1	GasStandingDataUpdate/ NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use="optional "	@checksum	xsd:integer" minInclusive="0" maxInclusive="9"
TransmissionZone	Integer(2)	Optional	This will contain the encoding of network operator and licence areas (Identified as <i>A</i> and <i>B</i> and defined in RMP appendix 1). This forms part of the gas zone code.	0..1	GasStandingDataUpdate/ MasterData	xsd:integer totalDig="2"
HeatingValueZone	String(3)	Optional	This will contain the encoding of sub-network and heating value zone (Identified as <i>CC</i> and <i>D</i> and defined in RMP appendix 1). This forms part of the gas zone code.	0..1	GasStandingDataUpdate/ MasterData	xsd:string maxLen="3"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
MIRNStatus	String(Enum) “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	Optional	This contains the status of the MIRN.	0..1	GasStandingDataUpdate/ MasterData	An enumerated list of xsd:string values: “Registered”, “Commissioned”, “Decommissioned”, “Deregistered”
BaseLoad	Decimal	Optional	This contains the non sensitive base load for the delivery point.	0..1	GasStandingDataUpdate/ MasterData	xsd:decimal totalDig=”9” fracDig=”1”
TemperatureSensitivityFactor	Decimal	Optional	This contains the temperature sensitivity heating rate for the delivery point.	0..1	GasStandingDataUpdate/ MasterData	xsd:decimal totalDig=”9” fracDig=”2”
MIRNCommissionedDate	Date	Optional	This contains the date on which the MIRN was commissioned.	0..1	GasStandingDataUpdate/ MasterData	xsd:date
SmallUseCustomer	Boolean	Optional	In WA: This contains a value to indicate whether the delivery point satisfies the criteria required to be a small use customer. In SA: If the Boolean SmallUseCustomer flag is true = Basic meter, if false an Interval meter.	0..1	GasStandingDataUpdate/ MasterData	xsd:Boolean

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Party	String(10)	Optional	This identifies the GBO identifier of the participant that is associated with the delivery point, taking on the Role identified by the corresponding Role found in "RoleAssignment/ Role" There will be as many RoleAssignments as necessary to communicate the data changes to the contracted parties, but at most one for each of the Roles "USER", "ROLR" and "NO"	0..1	RoleAssignments/ RoleAssignment/ Party	xsd:string
Role	String(4)	Optional	This identifies the Role of the participant as identified in "RoleAssignment/ Party" in the context of the delivery point . The Role may be: "USER"- Retailer "ROLR"-Retailer of Last Resort "NO"- Network Operator There will be as many RoleAssignments as necessary to communicate the data changes to the contracted parties, but at most one for each of "USER", "ROLR" and "NO".	1..1	RoleAssignments/ RoleAssignment/ Role	xsd:string maxLen="4"
SupplyPointCode	String(Enum) "Basic"=A basic meter "Interval"=An interval meter	Optional	This provides the information about the type of meter installed at the delivery point.	0..1	MeterData/ SupplyPointCode	An enumerated list of xsd:string values: "Basic", "Interval", "Transmission"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
LastModifiedDateTime	Date (with time)	Mandatory	This identifies the date and time at which the delivery point was last modified in the AEMO RegistryAEMO Registry. Note that the time component will always be set to the start of the gas day (transmitted in GMT+10 format).	1..1	LastModifiedDateTime	xsd:dateTime
LastModifiedBy	String(10)	Optional	This identifies the GBO identifier of the participant that initiated the last change to the AEMO RegistryAEMO Registry.	0..1	LastModifiedBy	xsd:string
DataChangeReasonCode	String See 0 for a list of allowable values and descriptions	Optional	The reason code used to identify the reason for the distribution of standing data.	0..1	DataChangeReasonCode	xsd:string
Description	The description associated with the change reason code. See 0 for a list of allowable values and descriptions	Optional	The text description associated with the DataChangeReasonCode	0..1	DataChangeReasonCode @description	xsd:string

8.2.3.2 Data Flow Definition: Deliver Standing Data (DSD)

This is a mechanism for distributing Market Operator standing data to the market.

8.2.3.2.1 AseXML Example Transaction

The following examples are provided to demonstrate AEMO Standing Data that will be provided during various business scenarios. Each elements contain test data and so data values should not be relied on, however these examples accurately reflect which fields will be populated for the given circumstance.

On Completion of a Transfer:

This transaction reflects the data that will be provided to the Current User on completion of a Transfer in South Australia:

```
<NMIStandingDataUpdateNotification version="r9">
  <SingleNMIStandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <BaseLoad>8880871.8</BaseLoad>
      <TemperatureSensitivityFactor>7770871.77</TemperatureSensitivityFactor>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNNWOP-01</Party>
        <Role>NO</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
    <LastModifiedDateTime>2003-11-25T00:06:30.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
```

This transaction reflects the data that will be provided to the Current User on completion of a Transfer in West Australia:

```
<NMIStandingDataUpdateNotification version="r9">
  <SingleNMIStandingData xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNNWOP-01</Party>
        <Role>NO</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
    <LastModifiedDateTime>2003-11-25T00:10:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
```

This transaction reflects the data that will be provided to the Network Operator on completion of a Transfer in both West Australia and South Australia:

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <RoleAssignments>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <LastModifiedDateTime>2003-11-25T00:10:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On Completion of a Transfer (Move-in):

This transaction reflects the data that will be provided to the Current User on completion of a Transfer (Move-in) in West Australia.:

```
<NMIStandingDataUpdateNotification version="r9">
  <SingleNMIStandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNNWOP-01</Party>
        <Role>NO</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
    <LastModifiedDateTime>2003-11-25T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
```

This transaction reflects the data that will be provided to the Current User on completion of a Transfer (Move-in) in South Australia

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <BaseLoad>8880871.8</BaseLoad>
      <TemperatureSensitivityFactor>7770871.77</TemperatureSensitivityFactor>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNNWOP-01</Party>
        <Role>NO</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
    <LastModifiedDateTime>2003-11-25T06:30:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

This example reflects the data that will be provided to the Network Operator on completion of a Transfer (Move-in) in both West Australia and South Australia:

```
<NMIStandingDataUpdateNotification version="r9">
  <SingleNMIStandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <RoleAssignments>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <LastModifiedDateTime>2003-11-25T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Transfer">DCR001</DataChangeReasonCode>
  </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of an Error Correction For Erroneous Transfer:

This example reflects the data that will be provided to the current User on completion of a Correction of Transfer in West Australia::

```
<NMIStandingDataUpdateNotification version="r9">
  <SingleNMIStandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
```

```
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
    </RoleAssignment>
    <RoleAssignment>
        <Party>AGNNWOP-01</Party>
        <Role>NO</Role>
    </RoleAssignment>
    <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
    </RoleAssignment>
</RoleAssignments>
<MeterData>
    <SupplyPointCode>Basic</SupplyPointCode>
</MeterData>
<LastModifiedDate>2003-11-25T00:10:00.000+10:00</LastModifiedDate>
<LastModifiedBy>AGNNWOP-01</LastModifiedBy>
<DataChangeReasonCode description="Error correction (Transfer)">DCR002</DataChangeReasonCode>
</SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

This example reflects the data that will be provided to the current User on completion of a Correction of Transfer in South Australia

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <BaseLoad>8880871.8</BaseLoad>
      <TemperatureSensitivityFactor>7770871.77</TemperatureSensitivityFactor>
      <TransmissionZone>18</TransmissionZone>
      <HeatingValueZone>121</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2003-09-01</MIRNCommissionedDate>
      <SmallUseCustomer>>false</SmallUseCustomer>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>BG_ROLR-01</Party>
        <Role>ROLR</Role>
```



```
</RoleAssignment>
<RoleAssignment>
  <Party>AGNNWOP-01</Party>
  <Role>NO</Role>
</RoleAssignment>
<RoleAssignment>
  <Party>AGNUSER-01</Party>
  <Role>USER</Role>
</RoleAssignment>
</RoleAssignments>
<MeterData>
  <SupplyPointCode>Basic</SupplyPointCode>
</MeterData>
<LastModifiedDateTime>2003-11-25T00:06:30.000+10:00</LastModifiedDateTime>
<LastModifiedBy>AGNNWOP-01</LastModifiedBy>
<DataChangeReasonCode description="Error correction (Transfer)">DCR002</DataChangeReasonCode>
</SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

This example reflects the data that will be provided to the Network Operator on completion of a Correction of Transfer in both West Australia and South Australia:

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <RoleAssignments>
      <RoleAssignment>
        <Party>AGNUSER-01</Party>
        <Role>USER</Role>
      </RoleAssignment>
    </RoleAssignments>
    <LastModifiedDateTime>2003-11-25T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Error correction (Transfer)">DCR002</DataChangeReasonCode>
  </SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of a Disconnection:

This example reflects the data that will be provided to the Current User AND Network Operator on completion of a Correction of Transfer in both West Australia and South Australia:

```
<NMISstandingDataUpdateNotification version="r9">
  <SingleNMISstandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <MIRNStatus>Decommissioned</MIRNStatus>
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>
    </MasterData>
    <LastModifiedDateTime>2003-01-02T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>AGNNWOP-01</LastModifiedBy>
    <DataChangeReasonCode description="Change to MIRN status">DCR005</DataChangeReasonCode>
  </SingleNMISstandingData>
</NMISstandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of a Reconnection:

This example reflects the data that will be provided to the Current User AND Network Operator on completion of a Reconnection in both West Australia and South Australia:

```
<NMISstandingDataUpdateNotification version="r9">
  <SingleNMISstandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="7">9876543210</NMI>
    <MasterData>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>
    </MasterData>
    <LastModifiedDateTime>2003-01-03T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>TXU_NWO</LastModifiedBy>
    <DataChangeReasonCode description="Change to MIRN status">DCR005</DataChangeReasonCode>
  </SingleNMISstandingData>
</NMISstandingDataUpdateNotification>
```

```
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of the Permanent removal of a MIRN:

This example reflects the data that will be provided to the Current User AND Network Operator on completion of the Permanent Removal of a MIRN in both West Australia and South Australia:

```
<NMISTandingDataUpdateNotification version="r9">  
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">  
    <NMI checksum="2">5600000278</NMI>  
    <MasterData>  
      <MIRNStatus>Deregistered</MIRNStatus>  
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>  
    </MasterData>  
    <LastModifiedDateTime>2003-08-23T00:10:00.000+10:00</LastModifiedDateTime>  
    <LastModifiedBy>TXU_NWO</LastModifiedBy>  
    <DataChangeReasonCode description="MIRN permanently removed">DCR006</DataChangeReasonCode>  
  </SingleNMISTandingData>  
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of a New Connection:

This example reflects the data that will be provided to the Current User on completion of the New connection of a MIRN in West Australia:

```
<NMISTandingDataUpdateNotification version="r9">  
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">  
    <NMI checksum="2">5600000278</NMI>  
    <MasterData>  
      <TransmissionZone>01</TransmissionZone>
```

```
<HeatingValueZone>581</HeatingValueZone>
<MIRNStatus>Commissioned</MIRNStatus>
<MIRNCommissionedDate>2003-08-23</MIRNCommissionedDate>
<SmallUseCustomer>true</SmallUseCustomer>
</MasterData>
<RoleAssignments>
  <RoleAssignment>
    <Party>TXU_USER</Party>
    <Role>USER</Role>
  </RoleAssignment>
  <RoleAssignment>
    <Party>ALINTAGAS</Party>
    <Role>ROLR</Role>
  </RoleAssignment>
  <RoleAssignment>
    <Party>TXU_NWO</Party>
    <Role>NO</Role>
  </RoleAssignment>
</RoleAssignments>
<MeterData>
  <SupplyPointCode>Basic</SupplyPointCode>
</MeterData>
<LastModifiedDateTime>2003-08-23T10:00:00.000+10:00</LastModifiedDateTime>
<LastModifiedBy>ALINTA_NWO</LastModifiedBy>
<DataChangeReasonCode description="New Connection">DCR007</DataChangeReasonCode>
</SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

This example reflects the data that will be provided to the Current User on completion of the New connection of a MIRN in South Australia:

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <BaseLoad>12.6</BaseLoad>
      <TemperatureSensitivityFactor>857.25</TemperatureSensitivityFactor>
```

```
<TransmissionZone>01</TransmissionZone>
<HeatingValueZone>581</HeatingValueZone>
<MIRNStatus>Commissioned</MIRNStatus>
<MIRNCommissionedDate>2003-08-23</MIRNCommissionedDate>
<SmallUseCustomer>>false</SmallUseCustomer>
</MasterData>
<RoleAssignments>
  <RoleAssignment>
    <Party>TXU_USER</Party>
    <Role>USER</Role>
  </RoleAssignment>
  <RoleAssignment>
    <Party>ALINTAGAS</Party>
    <Role>ROLR</Role>
  </RoleAssignment>
  <RoleAssignment>
    <Party>TXU_NWO</Party>
    <Role>NO</Role>
  </RoleAssignment>
</RoleAssignments>
<MeterData>
  <SupplyPointCode>Interval</SupplyPointCode>
</MeterData>
<LastModifiedDateTime>2003-08-23T6:30:00.000+10:00</LastModifiedDateTime>
<LastModifiedBy>TXU_NWO</LastModifiedBy>
<DataChangeReasonCode description="New Connection">DCR007</DataChangeReasonCode>
</SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

This example reflects the data that will be provided to the Network Operator on completion of the New Connection of a MIRN in West Australia and South Australia:

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="2">5600000278</NMI>
    <MasterData>
      <MIRNStatus>Commissioned</MIRNStatus>
```

```
<MIRNCommissionedDate>2003-08-23</MIRNCommissionedDate>
</MasterData>
<LastModifiedDateTime>2003-08-23T10:00:00.000+10:00</LastModifiedDateTime>
<LastModifiedBy>TXU_NWO</LastModifiedBy>
<DataChangeReasonCode description="New Connection">DCR007</DataChangeReasonCode>
</SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of a Data Change Notice:

This example reflects the data that will be provided to the Network Operator and Current User after a Data Change Notice initiates a change to Market Operator standing data in both West Australia and South Australia.

Changes to Gas Zone and Base Load:

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="7">9876543210</NMI>
    <MasterData>
      <BaseLoad>12.2</BaseLoad>
      <TransmissionZone>21</TransmissionZone>
      <HeatingValueZone>234</HeatingValueZone>
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>
    </MasterData>
    <LastModifiedDateTime>2003-08-23T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>TXU_NWO</LastModifiedBy>
    <DataChangeReasonCode description="Change to standing data">DCR004</DataChangeReasonCode>
  </SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

Changes to Heating Rate and Meter Type

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="7">9876543210</NMI>
    <MasterData>
      <TemperatureSensitivityFactor>652.32</TemperatureSensitivityFactor>
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>
    </MasterData>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
    <LastModifiedDateTime>2003-08-23T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>ALINTA_NWO</LastModifiedBy>
    <DataChangeReasonCode description="Change to standing data">DCR004</DataChangeReasonCode>
  </SingleNMISTandingData>
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

On completion of an Error Correction of the Permanent Removal of a MIRN :

This example reflects the data that will be provided to the Network Operator and Current User after a Error Correction has completed to undo the permanent removal of a MIRN in both West Australia and south Australia.

```
<NMISTandingDataUpdateNotification version="r9">
  <SingleNMISTandingData xsi:type="ase:GasStandingDataUpdate" version="r40">
    <NMI checksum="1">0123456789</NMI>
    <MasterData>
      <MIRNStatus>Commissioned</MIRNStatus>
      <MIRNCommissionedDate>2001-01-01</MIRNCommissionedDate>
    </MasterData>
    <LastModifiedDateTime>2003-08-23T10:00:00.000+10:00</LastModifiedDateTime>
    <LastModifiedBy>TXU_NWO</LastModifiedBy>
    <DataChangeReasonCode description="Error correction (MIRN permanently
removed)">DCR003</DataChangeReasonCode>
```

```
</SingleNMISTandingData>  
</NMISTandingDataUpdateNotification>
```

Note that <LastModifiedDateTime> would be 2003-11-25T00:06:30.000+10:00 in South Australia (assuming no DST).

8.3 New Connection

New connection is initiated by the network operator, when the network operator has commissioned a delivery point the network operator notifies Market Operator and then Market Operator distributes standing data to all interested participants.

8.3.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
<i>GasMeterNotification/MeterFix</i>		COM-DP	Network Operator	AEMO Registry AE MO Registry	AseXML	SORD	65	4.1	65

8.3.2 Code Summary

This table is a complete list of those codes used within the *New Connection* process to uniquely identify each particular flow.

Identifier	Data Flow Name
COM-DP	Commissioning of Delivery Point

8.3.3 GasMeterNotification/MeterFix Transaction

8.3.3.1 Physical Transaction

NOTE: A RoleAssignment will be provided for each of the, Network Operator and Current User.

NOTE: The gas zone will be encoded into the HeatingValuezone(string(3) – subnetwork and heating value zone) and TransmissionZone(integer(2) – network operator and licence area) (as per RMP appendix 1)

NOTE: SA only. A new connection confirmation notice is valid only if

- the MIRN does not already exist in AEMO’s metering database;
- it is lodged by the Network Operator for the GDS in which the delivery point is located;
- the User is validly registered with AEMO; • the date on which the notice is received is on or after the date on which the MIRN became energised;
- the meter type is either a basic meter or an interval meter;
- the gas zone exists in AEMO’s metering database;
- the User has a contract with a shipper for the haulage of gas to that delivery point.

GasMeterNotification/MeterFix

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
NMI	String(10)	Mandatory	The MIRN	1..1	MeterFix/NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use="optional" "	@checksum	xsd:integerminInclusive="0" maxInclusive="9"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
MIRNStatus	String(Enum) “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	Mandatory	Must be “Commissioned”	0..1	MasterData/MIRNStatus	An enumerated list of xsd:string values: “Registered”, “Commissioned”, “Decommissioned”, “Deregistered”
SupplyPointCode	String(Enum) “Basic”=A basic meter “Interval”=An interval meter	Mandatory	This provides the information about the type of meter installed at the delivery point.	0..1	MeterData/ SupplyPointCode	An enumerated list of xsd:string values: “Basic”, “Interval”, “Transmission”
AnticipatedAnnualConsumption	Integer(13)	Optional / Mandatory for basic MIRNS in WA	This provides the annual volume of gas anticipated to be withdrawn from the delivery point.	0..1	MasterData/ AnticipatedAnnualConsumption	xsd:integer totalDig=“13”
BaseLoad	Decimal	Optional / Mandatory for basic MIRNS in SA	This contains the non sensitive base load for the delivery point.	0..1	MasterData/ BaseLoad	xsd:decimal totalDig=“9” fracDig=“1”
TemperatureSensitivityFactor	Decimal	Optional / Mandatory for basic MIRNS in SA	This contains the temperature sensitivity heating rate for the delivery point.	0..1	GasStandingDataUpdate/ MasterData	xsd:decimal totalDig=“9” fracDig=“2”
DateServiceOrderCompleted	Date (10) ccyy-mm-dd	Mandatory	Provides the date on which the MIRN Status was changed, that is when the MIRN was commissioned.	1..1	DateServiceOrderCompleted	xsd:date

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
Party	String(10)	Mandatory	<p>This is the GBO of the party with the associated Role.</p> <p>We need to provide a RoleAssignment for each of the current user network operator. This will allow the following {party,Role} pairs to be used:</p> <p>Current user: {"USER",<GBO ID>}</p> <p>Network Operator: {"NO",<GBO ID>}</p>	0..infinity	MeterFix/RoleAssignments/RoleAssignment/Party	xsd:string
Role	String(4) "USER" – User "NO" – Network operator	Mandatory	<p>This is the Role of the associated Party.</p> <p>We need to provide a RoleAssignment for each of the current user and network operator. This will allow the following {party,Role} pairs to be used:</p> <p>Current user: {"USER",<GBO ID>}</p> <p>Network Operator: {"NO",<GBO ID>}</p>	0..infinity	MeterFix/RoleAssignments/RoleAssignment/Role	xsd:string maxLength="4"
TransmissionZone	Integer(2)	Mandatory	<p>This will contain the encoding of network operator and licence areas (Identified as <i>A</i> and <i>B</i> and defined in RMP appendix 1). This forms part of the gas zone code.</p>	0..1	MasterData/MasterData/TransmissionZone	xsd:integer totalDigs="2"
HeatingValueZone	String(3)	Mandatory	<p>This will contain the encoding of sub-network and heating value zone (Identified as <i>CC</i> and <i>D</i> and defined in RMP appendix 1). This forms part of the gas zone code.</p>	0..1	MasterData/HeatingValueZone	xsd:string maxLen="3"

8.3.3.2 Data flow Definition: Commissioning of Delivery Point (COM-DP)

This indicates that a network operator has commissioned a delivery point. This MIRN has become commissioned for the first time and gas is able to flow at the delivery point.

8.3.3.2.1 AseXML Example Transaction

In South Australia:

```
<GasMeterNotification version="r34">
  <MeterFix version="r40" xsi:type="ase:GasStandingData">
    <NMI checksum="2">5000000012</NMI>
    <MasterData>
      <BaseLoad>88.8</BaseLoad>
      <TemperatureSensitivityFactor>99.99</TemperatureSensitivityFactor>
      <TransmissionZone>11</TransmissionZone>
      <HeatingValueZone>011</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>ZRIGIN</Party>
        <Role>USER</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>ZAROLR</Party>
        <Role>ROLR</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>ZNVSA</Party>
        <Role>NO</Role>
      </RoleAssignment>
    </RoleAssignments>
  </MeterFix>
</GasMeterNotification>
```

```
<MeterData>
  <SupplyPointCode>Basic</SupplyPointCode>
</MeterData>
</MeterFix>
<DateServiceOrderCompleted>2004-04-01</DateServiceOrderCompleted>
</GasMeterNotification>
```

In Western Australia:

```
<GasMeterNotification version="r34">
  <MeterFix version="r40" xsi:type="ase:GasStandingData">
    <NMI checksum="7">5000000001</NMI>
    <MasterData>
      <TransmissionZone>11</TransmissionZone>
      <HeatingValueZone>011</HeatingValueZone>
      <MIRNStatus>Commissioned</MIRNStatus>
      <AnticipatedAnnualConsumption>901</AnticipatedAnnualConsumption>
    </MasterData>
    <RoleAssignments>
      <RoleAssignment>
        <Party>ZLS</Party>
        <Role>USER</Role>
      </RoleAssignment>
      <RoleAssignment>
        <Party>ZLN</Party>
        <Role>NO</Role>
      </RoleAssignment>
    </RoleAssignments>
    <MeterData>
      <SupplyPointCode>Basic</SupplyPointCode>
    </MeterData>
  </MeterFix>
  <DateServiceOrderCompleted>2004-04-01</DateServiceOrderCompleted>
</GasMeterNotification>
```

8.3.3.2.2 Event Codes

Event Code Number
201,202,3011,3013,3018,3200,3400,3402,3407,3410,3411,3413,3662

Note: In all cases the severity of each event will be “Error”.

8.4 Disconnection

8.4.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
<i>GasMeterNotification/MIRNStatus Update</i>		DIS-CON	Network Operator	The Registry	aseXML	SORD	107	4.2.1	107
							111	4.2.2	111
								4.2.4	
<i>MeterDataMissingNotification</i>		DIS-MR-ALT	The Registry	Network Operator	aseXML	MDMT	115	4.2.5	115

8.4.2 Code Summary

This table is a complete list of those codes used within the *Disconnection* process to uniquely identify each particular flow.

Identifier	Data Flow Name
DIS-CON	Disconnection Confirmation Notice
DIS-MR-ALT	No Disconnection meter reading alert

8.4.3 GasMeterNotification/MIRNStatusUpdate Transaction

8.4.3.1 Physical Transaction

NOTE: The DateServiceOrderCompleted will always be the date that the MIRN status changed.

NOTE: SA only. A disconnection confirmation notice is valid only if:

- the delivery point exists within AEMO’s metering database;
- the MIRN status is not deregistered;
- the date on which the notice is received is on or after the date on which the delivery point was disconnected;
- there is no open disconnection confirmation notice or open permanent removal confirmation notice for the delivery point; and
- the date the delivery point was disconnected did not occur more than 425 days before the date the disconnection confirmation notice was lodged.

GasMeterNotification/MIRNStatusUpdate

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
NMI	String(10)	Mandatory	The MIRN	1..1	NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use="optional "	@checksum	xsd:integerminInclusive="0" maxInclusive="9"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
MIRNStatus	String(Enum) “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	Mandatory	The MIRN status must be ”Decommissioned”	0..1	MasterData/MIRNStatus	An enumerated list of xsd:string values: “Registered”, “Commissioned”, “Decommissioned”, “Deregistered”
DateServiceOrderCompleted	Date (10) ccyy-mm-dd	Mandatory	Provides the date on which the MIRN Status was changed, that is when the MIRN was disconnected.	1..1	GasMeterNotification	xsd:date

8.4.3.2 Data flow Definition: Disconnection Confirmation Notice (DIS-CON)

This flow identifies that a MIRN has been decommissioned after a disconnection. An actual value is also required, but will arrive as part of a separate data flow (BSCMR ‘Basic Meter Read Data’ or INTMR ‘Interval Meter Read Data’).

8.4.3.2.1 AseXML Example Transaction

```
<GasMeterNotification version="r34">
  <MIRNStatusUpdate version="r40" xsi:type="ase:GasStandingData">
    <NMI checksum="1">5000000003</NMI>
    <MasterData>
      <MIRNStatus>Decommissioned</MIRNStatus>
    </MasterData>
  </MIRNStatusUpdate>
  <DateServiceOrderCompleted>2004-06-15</DateServiceOrderCompleted>
```

</GasMeterNotification>

8.4.3.2.2 Event Codes

Event Code Number
202,3013,3018,3200,3400,3410,3411,3662

Note: In all cases the severity of each event will be “Error”.

8.4.4 MeterDataMissingNotification Transaction

8.4.4.1 Physical Transaction

MeterDataMissingNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RecordCount	Integer(10)	Mandatory	A count of the number of records included in the CSV payload.	1..1	CSVMissingMeterData/RecordCount	xsd:integer totalDigits="10"
CSVMissingMeterData	String(240)	Mandatory		1..1	CSVMissingMeterData	xsd:string

The following describes the CSV contents of the data element *CSVMissingMeterData*.

Heading	Usage	Usage/ Comments
NMI	Mandatory	The MIRN for which the energy data is missing
NMI_Checksum	Mandatory	The MIRN checksum

Heading	Usage	Usage/ Comments
Last_Read_Date	Mandatory	<p>This is the calendar day before the date on which meter readings are required to complete a status change for a MIRN.</p> <p>The Network Operator is to supply all energy data calculated since this date.</p> <p>If no date is supplied then the network operator is to supply energy data calculated since commencement of the Retail Market.</p>

8.4.4.2 Data flow Definition: No Disconnection meter reading alert (DIS-MR-ALRT)

This is the means to notify the network operator that valid meter data has not been received to support the disconnection confirmation notice within 2 business days.

8.4.4.2.1 AseXML Example Transaction

```
<MeterDataMissingNotification version="r14">
  <CSVMissingMeterData>
    <RecordCount>1</RecordCount>
    <CSVData>NMI,NMI_Checksum,Last_Read_Date
      5000000007,2,2004-02-09</CSVData>
  </CSVMissingMeterData>
</MeterDataMissingNotification>
```

8.5 Reconnection

8.5.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
<i>GasMeterNotification/MIRNStatus Update</i>		REC-CON	Network Operator	The Registry	AseXML	SORD	119	4.2.8	119
<i>MeterDataMissingNotification</i>		REC-MR-ALT	The Registry	Network Operator	AseXML	MDMT	123	4.2.9	123

8.5.2 Code Summary

This table is a complete list of those codes used within the *Reconnection* process to uniquely identify each particular flow.

Identifier	Data Flow Name
REC-CON	Reconnection Confirmation Notice
REC-MR-ALT	No Reconnection meter reading alert

8.5.3 GasMeterNotification/MIRNStatusUpdate Transaction

8.5.3.1 Physical Transaction

NOTE: The Network Operator GBO ID will be available in the message header.

NOTE: The DateServiceOrderCompleted will always be the date that the MIRN status changed.

NOTE: SA only- A reconnection confirmation notice is valid only if:

- the delivery point exists within AEMO’s metering database;
- the MIRN status is not deregistered; • the date on which the reconnection confirmation notice is received is on or after the date on which the delivery point was reconnected;
- there is no open reconnection confirmation notice or open permanent removal confirmation notice;
- the date the delivery point was reconnected did not occur more than 425 days before the date the reconnection confirmation notice was lodged.

GasMeterNotification/MIRNStatusUpdate

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
NMI	String(10)	Mandatory	The MIRN	1..1	NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use="optional" "	@checksum	xsd:integerminInclusive="0" maxInclusive="9"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
MIRNStatus	String(Enum) “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	Mandatory	The MIRN status must be “Commissioned”	0..1	MasterData/MIRNStatus	An enumerated list of xsd:string values: “Registered”, “Commissioned”, “Decommissioned”, “Deregistered”
DateServiceOrderCompleted	Date (10) ccy-mm-dd	Mandatory	Provides the date on which the MIRN Status was changed, that is when the MIRN was disconnected.	1..1	DateServiceRequestCompleted	xsd:date

8.5.3.2 Data flow Definition: Reconnection Confirmation Notice (REC-CON)

This flow is the confirmation from the network operator notifying AEMO that a MIRN has been reconnected (and so is Commissioned) and providing an actual value

8.5.3.2.1 AseXML Example Transaction

```
<GasMeterNotification version="r34">
  <MIRNStatusUpdate version="r40" xsi:type="ase:GasStandingData">
    <NMI checksum="1">5000000003</NMI>
    <MasterData>
      <MIRNStatus>Commissioned</MIRNStatus>
    </MasterData>
  </MIRNStatusUpdate>
  <DateServiceOrderCompleted>2004-07-01</DateServiceOrderCompleted>
```

</GasMeterNotification>

8.5.3.2.2 Event Codes

Event Code Number
202,3013,3018,3400,3407,3410,3411,3662

Note: In all cases the severity of each event will be “Error”.

8.5.4 MeterDataMissingNotification Transaction

8.5.4.1 Physical Transaction

The physical flow for this data interface is captured under section 8.4.4.1

8.5.4.2 Data flow Definition: No Reconnection meter reading alert (REC-MR-ALRT)

This is the means to notify the network operator that valid meter data has not been received to action the reconnection within two business days.

8.5.4.2.1 AseXML Example Transaction

```
<MeterDataMissingNotification version="r14">  
  <CSVMissingMeterData>  
    <RecordCount>1</RecordCount>  
    <CSVData>NMI,NMI_Checksum,Last_Read_Date  
      5000000007,2,2004-02-09</CSVData>  
  </CSVMissingMeterData>  
</MeterDataMissingNotification>
```

8.6 Decommissioning Delivery Points

8.6.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
<i>GasMeterNotification/MIRNStatus Update</i>		PR-CON	Network Operator	The <i>Registry</i>	AseXML	SORD	127	4.4.2	127
<i>MeterDataMissingNotification (WA Only)</i>		PR-MR-ALT	The <i>Registry</i>	Network Operator	AseXML	MDMT	131	N/A	131

8.6.2 Code Summary

This table is a complete list of those codes used within the *Decommission* process to uniquely identify each particular flow.

Identifier	Data Flow Name
PR-CON	Permanent Removal Confirmation Notice
PR-MR-ALT (WA Only)	No Permanent Removal Meter Reading Alert

8.6.3 GasMeterNotification/MIRNStatusUpdate Transaction

8.6.3.1 Physical Transaction

NOTE: The Network Operator GBO ID will be available in the message header.

NOTE: The DateServiceOrderCompleted will always be the date that the MIRN status changed.

NOTE: SA Only - A permanent removal request is valid only if:

- the MIRN status is energised or de-energised;
- it relates to a delivery point in the Network Operator’s sub-network;
- it is lodged by the current User;
- it is lodged within the time period allowed
- If a permanent removal request was not lodged on a business day, the Network Operator must respond to the permanent removal

GasMeterNotification/MIRNStatusUpdate:

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
NMI	String(10)	Mandatory	The MIRN	1..1	NMI	xsd:string length="10"
Checksum	Integer(1)	Mandatory	The MIRN Checksum	Use="optional"	@checksum	xsd:integer" minInclusive="0"maxInclusive="9"

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
MIRNStatus	String(Enum) “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	Mandatory	The MIRN status must be “Deregistered”	0..1	MasterData/MIRNStatus	An enumerated list of xsd:string values: “Registered”, “Commissioned”, “Decommissioned”, “Deregistered”
DateServiceOrderCompleted	Date (10) ccyy-mm-dd	Mandatory	Provides the date on which the MIRN Status was changed, that is when the MIRN was disconnected.	1..1	DateServiceRequestCompleted	xsd:date

8.6.3.2 Data flow Definition: Permanent Removal Confirmation Notice (PR-CON)

This flow is notification from the network operator that a MIRN has been deregistered.

8.6.3.2.1 AseXML Example Transaction

```
<GasMeterNotification version="r34">
  <MIRNStatusUpdate version="r40" xsi:type="ase:GasStandingData">
    <NMI checksum="3">5000000002</NMI>
    <MasterData>
      <MIRNStatus>Deregistered</MIRNStatus>
    </MasterData>
  </MIRNStatusUpdate>
  <DateServiceOrderCompleted>2004-07-01</DateServiceOrderCompleted>
</GasMeterNotification>
```

8.6.3.2.2 Event Codes

Event Code Number
202,3013,3018,3400,3407,3410,3411

Note: In all cases the severity of each event will be “Error”.

8.6.4 MeterDataMissingNotification Transaction (WA Only)

8.6.4.1 Physical Transaction

The physical flow for this data interface is captured under section 8.4.4.1

8.6.4.2 Data flow Definition: No Permanent Removal Meter Reading Alert (PR-MR-ALRT)

This is the means to notify the network operator that valid meter data has not been received to action the decommission within the required period.

8.6.4.2.1 AseXML Example Transaction

```
<MeterDataMissingNotification version="r14">  
  <CSVMissingMeterData>  
    <RecordCount>1</RecordCount>  
    <CSVData>NMI,NMI_Checksum,Last_Read_Date  
      5000000007,2,2004-02-09</CSVData>  
  </CSVMissingMeterData>  
</MeterDataMissingNotification>
```

8.7 Electronic Files

Transactions have been classified in terms of the definitions in the BS section 1.8

8.7.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref:	BS Ref.
Electronic File	N/A	PROV-BSD	The Registry	Network Operator/ Current User	Bulk Electronic File	23, 31(2)	N/A N/A	23 N/A
Electronic File	N/A	PROV-HSD	The Registry	Network Operator/ Current User	Bulk Electronic File	57	N/A	N/A
Electronic File	N/A	PROV-ROLR-TFR	The Registry	Network Operator	Bulk Electronic File	104	N/A	N/A
Electronic File	N/A	PROV-ROLR-CNCL-TX	The Registry	Network Operator/ Incoming User/ Previous User	Bulk Electronic File	104	N/A	N/A
Electronic File	N/A	BLHR	Network Operator	The Registry	Bulk Electronic File	31	N/A	N/A

8.7.2 Code Summary

This table is a complete list of those codes used to uniquely identify each ‘*electronic file*’ flow.

Identifier	Data Flow Name
PROV-BSD	Provision of bulk Market Operator standing data
PROV-HSD	Provision of historical Market Operator standing data
MRDS-RPT	Provision of meter registration data – Settlement report
MRD-RPT	Provision of meter registration data
MIRN-UPD-RPT	Provision of Customer/MIRN Status
PROV-ROLR-TFR	Provision of MIRNs transferred to ROLR
PROV-ROLR-CNCL-TX	Provision of transactions cancelled during a ROLR event
BLHR	Base Load and Heating Rate

8.7.3 Provision of bulk Market Operator standing data

8.7.3.1 Data Flow Definition: Provision of bulk Market Operator standing data (PROV-BSD)

This is a mechanism for providing the network operator with the standing data for those delivery points that are within the network operators Gas Distribution System (GDS).

The same mechanism shall be used to distribute delivery point standing data to a user, where that user is the current user for those delivery points.

NOTE: As defined in the BS, the PROV-BSD flow will be used to provide the standing data information after a Base Load and Heating Rate update is provided via the BLHR dataflow.

NOTE: (SA Only) AEMO must provide bulk AEMO standing data to each Participant on the first business day of the month.

NOTE: (SA Only) If the SMALL_CUSTOMER flag = “Y” indicates a Basic meter, “N” an Interval meter.

8.7.3.2 Physical Mapping

Physical Name	Optionality
MIRN	1
MIRN_CHECKSUM	1
MIRN_STATUS	1
MIRN_COMMISSIONED_DATE	1
USER_GBO_ID	1
CU_EFFECTIVE_DATE	1
ROLR_ID	1
NETOP_GBO_ID	1
METER_TYPE	1
TRANSMISSION_ZONE	1
HV_ZONE	1

Physical Name	Optionality
SMALL_CUSTOMER	1
NON_TEMP_SENSITIVE_BASELOAD	1
TEMP_SENSITIVE_HEATING_RATE	1
LAST_MODIFICATION_DATE	1
PARTICIPANT_LAST_CHANGE	1
DATA_GENERATION_DATE	1

Notes:

- MIRN Change Date identifies the date at which the MIRN status took the provided status.
- TRANSMISSION_ZONE contains the encoding of network operator and licence areas (Identified as A and B and defined in RMP appendix 1). This forms part of the gas zone code.
- HV_ZONE contains the encoding of sub-network and heating value zone (Identified as CC and D and defined in RMP appendix 1). This forms part of the gas zone code.
- CU_EFFECTIVE_DATE identifies the date on which the current user became the current user for the MIRN.
- The PROV-BSD flow is sorted by MIRN in ascending order.

8.7.3.3 Example

```
MIRN,MIRN_CHECKSUM,MIRN_STATUS,MIRN_COMMISSIONED_DATE,USER_GBO_ID,CU_EFFECTIVE_DATE,ROLR_ID,NETOP_GBO_ID,METER_TYPE,TRANSMISSION_ZONE,
HV_ZONE,SMALL_CUSTOMER,NON_TEMP_SENSITIVE_BASELOAD,TEMP_SENSITIVE_HEATING_RATE,LAST_MODIFICATION_DATE,PARTICIPANT_LAST_CHANGE,
DATA_GENERATION_DATE
5500003074,5,Commissioned,2003-10-01,ALINTAGAS,2003-10-01,ALINTAGAS,ALINTANET,B,12,16G,Y,99999999.9,99999999.99,2003-09-20,ALINTAGAS,
2003-11-01
5600008129,0,Decommissioned,2003-10-20,ALINTAGAS,2003-10-01,ALINTAGAS,ALINTANET,B,12,16G,Y,99999999.9,99999999.99,2003-09-
24,ALINTAGAS,2003-11-01
5600023478,8,Commissioned,2003-09-23,ALINTAGAS,2003-10-01,ALINTAGAS,ALINTANET,B,12,16G,Y,99999999.9,99999999.99,2003-09-
20,ALINTAGAS,2003-11-01
5600079467,4,Commissioned,2003-10-23,ALINTAGAS,2003-10-01,ALINTAGAS,ALINTANET,B,12,16G,Y,99999999.9,99999999.99,2003-09-
```

20,ALINTAGAS, 2003-11-01
5600102781,3, Deregistered,2003-10-30,ALINTAGAS,2003-10-01,ALINTAGAS,ALINTANET,B,12,16G,Y,99999999.9,99999999.99,2003-09-
20,ALINTAGAS, 2003-11-01

8.7.4 Provision of historical Market Operator standing data

8.7.4.1 Data Flow Definition: Provision of historical Market Operator standing data (PROV-HSD)

This allow for the provisioning of historical Market Operator standing data

NOTE1: (SA Only) Should AEMO receive a request from a Participant for historical Market Operator standing data, AEMO must advise the requesting Participant within 5 business days when the historical Market Operator standing data generated

NOTE2: (SA Only) AEMO may, having regard to the number of historical AEMO standing data requests it receives, impose a daily limit on the number of historical AEMO standing data requests that a Participant may lodge under paragraph (a) for a fixed or indefinite period

NOTE3: (SA Only) If the SMALL_CUSTOMER flag = “Y” indicates a Basic meter, “N” an Interval meter,

8.7.4.2 Physical Mapping

Physical Name	Optionality
MIRN	1
MIRN_CHECKSUM	1
MIRN_STATUS	1
MIRN_COMMISSIONED_DATE	1
START_DATE	1
END_DATE	1
USER_GBO_ID	1
ROLR_ID	1
NETOP_GBO_ID	1
METER_TYPE	1
TRANSMISSION_ZONE	1

Physical Name	Optionality
HV_ZONE	1
SMALL_CUSTOMER	1
NON_TEMP_SENSITIVE_BASELOAD	1
TEMP_SENSITIVE_HEATING_RATE	1
LAST_MODIFICATION_DATE	1
PARTICIPANT_LAST_CHANGE	1
RECORD_EFFECTIVE_FROM_DATE	1
DATA_GENERATION_DATE	1

Notes:

- MORN Change Date identifies the date at which the MORN status took the provided status.
- TRANSMISSION_ZONE contains the encoding of network operator and licence areas (Identified as A and B and defined in RMP appendix 1). This forms part of the gas zone code.
- HV_ZONE contains the encoding of sub-network and heating value zone (Identified as CC and D and defined in RMP appendix 1). This forms part of the gas zone code

8.7.4.3 Example

```
MORN,MORN_CHECKSUM,MORN_STATUS,MORN_COMMISSIONED_DATE,START_DATE,END_DATE,,USER_GBO_ID,ROLR_ID,NETOP_GBO_ID,METER_TYPE,TRANSMISSION_ZONE,HV_ZONE,SMALL_CUSTOMER,NON_TEMP_SENSITIVE_BASELOAD,TEMP_SENSITIVE_HEATING_RATE,LAST_MODIFICATION_DATE,PARTICIPANT_LAST_CHANGE,RECORD_EFFECTIVE_FROM_DATE,DATA_GENERATION_DATE
5600079467,4,Commissioned,2003-09-05,2003-09-10,2003-09-25,ALINTAGAS,ALINTAGAS,ALINTANET,B,11,06P,Y,99999999.9,999999999.99,2003-09-06,ALINTANET,2003-09-10,2004-01-24
5600079467,4,Decommissioned,2003-09-05,2003-09-10,2003-09-25,ALINTAGAS,ALINTAGAS,ALINTANET,B,11,06P,Y,99999999.9,999999999.99,2003-11-05,ALINTANET,2003-09-10,2004-01-24
5600079467,4,Deregistered,2003-09-05,2003-09-10,2003-09-25,ALINTAGAS,ALINTAGAS,ALINTANET,B,11,06P,Y,99999999.9,999999999.99,2003-11-26,ALINTANET,2003-09-25,2004-01-24
```

8.7.5 Metering Registration Data (Settlements Report) (MRDS-RPT) (SA ONLY)

Publish metering registration details in a static, participant specific, CSV file.

When Issued: Issue of Settlement, inclusive of revisions (Monthly)

8.7.5.1 Report definition

The report is generated for one month, corresponding to the settlement period inclusive of revisions, and includes only the details of MIRNs where the participant is/was the FRO for those MIRNs during the settlement period

NOTE: If the SMALL_CUSTOMER flag = “Y” indicates a Basic meter, “N” an Interval meter.

8.7.5.2 Physical Mapping

The data for this flow must be provided in as an automated electronic file.

Physical Name	Optionality
MIRN	1
GAS_DAY	1
GATEPOINT_ID	1
HV_ZONE	1
SUB_NETWORK_ID	1
METER_TYPE	1
METER_NUMBER	1
SMALL_CUSTOMER	1
TRANSMISSION_ZONE	1
MIRN_COMMISSIONED_DATE	1
USER_GBO_ID	1
NETOP_GBO_ID	1
ROLR_ID	1

Physical Name	Optionality
PIPELINE_ID	1
LAST_MODIFICATION_DATE	1
TEMP_SENSITIVE_HEATING_RATE	1
MIRN_STATUS	1
BASE_LOAD	1
REPORT_DATE	1
SETTLEMENT_RUNID	1

Note: Meter type = Interval or Basic

Small Customer = Y/N

Pipeline_Id = Unique identifier; eg S=Seagas, M=Moomba

MIRN Status = Commissioned, Decommissioned, Deregistered

SETTLEMENT_RUNID = “NAP”, “NAF”, “NAR” (Preliminary, Final and Revised)

8.7.5.3 Event Codes

Event Code Number
No event codes as report is outgoing.

8.7.5.4 Examples

NMI, GAS_DAY, GATEPOINT_ID, HEATING_VALUE_ZONE, SUB-NETWORK_ID, METER_TYPE, METER_NUMBER, SMALL_CUSTOMER, TRANSMISSION_ZONE, COMMISSIONED_DATE, USER_GBO_ID, NETOP_GBO_ID, ROLR_ID, PIPELINE_ID, MODIFIED_DATETIME, HEATING_RATE, MIRN_STATUS, BASE_LOAD, CURRENT_DATE, SETTLEMENT_RUNID

Values to be provided later

8.7.6 Metering Registration Data (MRD-RPT) (SA ONLY)

Details of meter by MIRN. Updated list posted each day.. details in a static, participant specific, CSV file.

When Issued: Publishes daily 7 day rolling data or when updates have been received. Only the updates and changes to MIRN registration data would need to be issued to retailers

8.7.6.1 Report definition

The report is generated daily or when updates have been received. Only the updates and changes to MIRN registration data would need to be issued to retailers

NOTE: If the SMALL_CUSTOMER flag = “Y” indicates a Basic meter, “N” an Interval meter.

8.7.6.2 Physical Mapping

The data for this flow must be provided in as an automated electronic file.

Physical Name	Optionality
MIRN	1
GAS_DAY	1
GATEPOINT_ID	1
HV_ZONE	1
SUB_NETWORK_ID	1
METER_TYPE	1
METER_NUMBER	1
SMALL_CUSTOMER	1
TRANSMISSION_ZONE	1
MIRN_COMMISSIONED_DATE	1
USER_GBO_ID	1
NETOP_GBO_ID	1

Physical Name	Optionality
ROLR_ID	1
PIPELINE_ID	1
LAST_MODIFICATION_DATE	1
TEMP_SENSITIVE_HEATING_RATE	1
MIRN_STATUS	1
BASE_LOAD	1
REPORT_DATE	1

Note: Meter type = Interval or Basic

Small Customer = Y/N

Pipeline_Id = Unique identifier; eg S=Seagas, M=Moomba

MIRN Status = Commissioned, Decommissioned, Deregistered

8.7.6.3 Event Codes

Event Code Number
No event codes as report is outgoing.

8.7.6.4 Examples

NMI, GAS_DAY, GATEPOINT_ID, HEATING_VALUE_ZONE, SUB-NETWORK_ID, METER_TYPE, METER_NUMBER, SMALL_CUSTOMER, TRANSMISSION_ZONE, COMMISSIONED_DATE, USER_GBO_ID, NETOP_GBO_ID, ROLR_ID, PIPELINE_ID, MODIFIED_DATETIME, HEATING_RATE, MIRN_STATUS, BASE_LOAD, CURRENT_DATE, SETTLEMENT_RUNID

Values to be provided later

8.7.7 Customer/MIRN Status (MIRN-UPD-RPT) (SA ONLY)

This report is a MP specific report that shows the MIRNs won or lost, its commissioned status and the date of the change in status. The report will be generated each day and show a rolling 30 days of data for the avoidance of doubt this report only has entries for MIRNs that have changed FRO or status during the period and includes changes arising from a meter fix, reconnection, disconnection, abolishment, normal transfer and error correction.

When Issued: Daily

8.7.7.1 Report definition

This report only has entries for MIRNs that have changed FRO or MIRN status during the period.

NOTE: (SA Only) If the SMALL_CUSTOMER flag = “Y” indicates a Basic meter, “N” an Interval meter.

8.7.7.2 Physical Mapping

The data for this flow must be provided in as an automated electronic file.

Physical Name	Optionality
MIRN	1
GAS_DAY	1
SUB_NETWORK_ID	1
MOVEMENT	1
MIRN_STATUS	1
SMALL_CUSTOMER	1
METER_TYPE	1
LAST_MODIFICATION_DATE	1
REPORT_DATE	1

Note: Gas_Day field contains the Effective_From date of the meter in this report.

Movement = Won or Lost or None

Small Customer = Y/N

MIRN Status = Commissioned, Decommissioned, Deregistered

8.7.7.3 Event Codes

Event Code Number
No event codes as report is outgoing.

8.7.7.4 Examples

MIRN, GAS_DAY, SUB-NETWORK_ID, MOVEMENT, MIRN_STATUS, SMALL_CUSTOMER, METER_TYPE,
LAST_MODIFICATION_DATE, REPORT_DATE
5783234311,2011-10-25,2101,L,Commissioned,Y,B,2011-10-27,2011-11-18
5738343212,2011-11-04,2101,W,Commissioned,Y,B,2011-11-08,2011-11-18

8.7.8 Provision of MIRNs transferred to ROLR (SA and WA)

8.7.8.1 Data Flow Definition: Provision of MIRNs transferred to ROLR (PROV-ROLR-TFR) (WA Only)

This allows for the identification of a bulk list of MIRN that have been transferred to a new user as the result of an ROLR event.

8.7.8.2 Physical Mapping

Physical Name	Optionality
MIRN	1
MIRN_CHECKSUM	1
MIRN_STATUS	1
USER_GBO_ID	1

8.7.8.3 Example

```
MIRN,MIRN_CHECKSUM,MIRN_STATUS,USER_GBO_ID  
5500000278,4,Commissioned,ALINTAGAS  
5500003074,5,Commissioned,ORINGAS  
5500023478,0,Commissioned,ALINTAGAS  
5500047359,4,Commissioned,ALINTAGAS  
5500067253,5,Commissioned,TXUGAS  
5500079467,6,Commissioned,ALINTAGAS  
5500089000,8,Commissioned,ALINTAGAS  
5500099352,6,Commissioned,ALINTAGAS  
5500102781,5,Commissioned,ALINTAGAS
```

8.7.8.4 Data Flow Definition: Provision of MIRNs transferred to ROLR (PROV-ROLR-TFR) (SA Only)

This allows for the identification of a bulk list of MIRN that have been transferred to a new user as the result of an ROLR event.

8.7.8.5 Physical Mapping

Physical Name	Optionality
MIRN	1
MIRN_CHECKSUM	1
FRB	1
ROLR_ID	1
ROLR_DATE	1

8.7.8.6 Example

```
MIRN,MIRN_CHECKSUM,FRB, ROLR_ID, ROLR_DATE  
5500000278,4, TXUGAS, ORIGINGAS, 2004-07-23  
5500003074,5, TXUGAS, ORIGINGAS, 2004-07-23  
5500023478,0, TXUGAS, ORIGINGAS, 2004-07-23  
5500047359,4, TXUGAS, ORIGINGAS, 2004-07-23
```

8.7.9 Provision of Transactions Cancelled during a ROLR event (WA ONLY)

8.7.9.1 Data Flow Definition: Provision of Transactions Cancelled during a ROLR event (PROV-ROLR-CNCL-TX)

This enables the communication of a list transactions that were cancelled as the result of an ROLR event.

8.7.9.2 Physical Mapping

Physical Name	Optionality
INITIATING_REQUEST_ID	1
MIRN	1
MIRN_CHECKSUM	1
PROCESS_START_DATE	1

8.7.9.3 Example

```
INITIATING_REQUEST_ID,MIRN,MIRN_CHECKSUM,PROCESS_START_DATE  
1,5500000278,4,2004-07-23  
2,5500003074,5,2004-07-19  
3,5500008129,2,2004-06-01
```

8.7.10 Base Load and Heating Rate (BLHR)

8.7.10.1 Data flow Definition

Network operator to notify the GRMS Operations staff of the base load and the heating rate for each basic-metered delivery point.

8.7.10.2 Physical Mapping

Physical Name	Optionality
MIRN	1
EFFECTIVE_DATE	1
BASE_LOAD	1
HEATING_RATE	1

8.7.10.3 Example

```
MIRN,EFFECTIVE_DATE,BASE_LOAD,HEATING_RATE  
DPI5000111,2003-01-01,1000,22  
DPI5000122,2003-01-01,1500,22  
DPI5000133,2003-01-01,1500,22  
DPI5000144,2003-01-01,1000,22  
DPI5000155,2003-01-01,2000,22  
DPI5000166,2003-01-01,1700,22  
DPI5000177,2003-01-01,1000,22
```

8.8 Notices

Transactions have been classified in terms of the definition in the BS section 1.8

8.8.1 Code Summary

The table below is a complete list of those codes used to uniquely identify each notice.

Identifier	Data Flow Name
ECNND	Error Correction Notice for New Connection and Permanent Removal
ECNND-CONF-NOTF	Error correction for New Connection and Permanent Removal Confirmation Notification
ECNND-REJ	Error Correction Notice For New Connection and Permanent Removal rejected
DCN	Data change Notice
DCN-CAN-NOTF	Data Change Notice Cancelled Notification
DCN-MULT	Multiple Data change Notice
DCN-NO-MULT-NOTF	Notification that Multiple Data change Notice is not appropriate
REQ-BSD	Request For Bulk Standing Data
NOT-BSD-REJ	Notification of request for bulk standing Data rejected
NOT-SNC	Notice of new sub-network code
NOT-SDGEN	Notice of the time and date of Market Operator standing data generation
NOT-GBO	Notice of Market Operator GBO ID.
REQ-HSD	Historical Market Operator standing data request
WDR-HSD	Withdraw Historical Market Operator Standing Data request
NOT- HSD-REJ	Notification that Historical Market Operator Standing Data request was rejected.

Identifier	Data Flow Name
NOT-NOCHNG	Notice of no change made to registry entity
NOT-ROLR	Notice of invocation of ROLR scheme
NOT-ROLR-TD	Notification of ROLR transfer day
GBO-CHNG	Notice of change to GBO information
GBO-STATUS-CHNG	Notice of change to GBO Status
DIS-CAN-NOTF	Disconnection Cancelled Notification
REC-CAN-NOTF	Reconnection Cancelled Notification
PR-CAN-NOTF	Permanent Removal Cancelled Notification
NOT-NODB	Notice of change required in network operator databases
NOT-NODB-NOCHNG	Notice of no change made to network operator databases
NOT-DET-DEMAND	Determination of above 10TJ Demand

8.8.2 Mapping

Physical Transaction	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Notice	ECNND	Network Operator	The <i>Registry</i>	Notice	32	9.1.1	32
Notice	ECNND-CONF-NOTF	The <i>Registry</i>	Network Operator/ Current User	Notice	35	9.1.3	35
Notice	ECNND-REJ	The <i>Registry</i>	Network Operator	Notice	34	9.1.2	34
Notice	DCN	Network Operator/ Provider of BL and HR	The <i>Registry</i>	Notice	27	N/A	27

Physical Transaction	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Notice	DCN-MULT	Network Operator/ Provider of BL and HR	The <i>Registry</i>	Notice	27	N/A	27
Notice	DCN-NO-MULT-NOTF	The <i>Registry</i>	Network Operator/ Provider of BL and HR	Notice	27	N/A	27
Notice	DCN-CAN-NOTF	The <i>Registry</i>	Network Operator/ Provider of BL and HR	Notice	31 133	N/A 4.5	31 133
Notice	NOT-SNC	Network Operator	Market Operator GRMS Ops	Notice	15	1.6	15
Notice	NOT-SDGEN	The <i>Registry</i>	Network Operator/ Current User	Notice	23	N/A	23
Notice	REQ-BSD	Network Operator/ Current User	The <i>Registry</i>	Notice	23	N/A	23
Notice	NOT-BSD-REJ	The <i>Registry</i>	Participant	Notice	23	N/A	23
Notice	NOT-GBO	RMA	GRMS Operations/ Participant	Notice	22	N/A	22
Notice	REQ-HSD	Participant	GRMS Operations	Notice	56	N/A	N/A

Physical Transaction	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Notice	NOT- HSD-REJ	The Registry	Participant	Notice	57	N/A	N/A
Notice	NOT-NOCHNG	The Registry	Network Operator / Provider of BL and HR	Notice	29	N/A	N/A
Notice	NOT-ROLR	RMA	The Registry	Notice	104	N/A	N/A
Notice	NOT-ROLR-TD	The Registry	Participant	Notice	104	N/A	N/A
Notice	GBO-CHNG	RMA	The Registry	Notice	22	N/A	N/A
Notice	GBO-STATUS-CHNG	The Registry	Participant	Notice	22	N/A	N/A
Notice	DIS-CAN-NOTF	The Registry	Network Operator	Notice	115 31 133	4.2.5 N/A 4.5	115 N/A 133
Notice	REC-CAN-NOTF	The Registry	Network Operator	Notice	123 133	4.2.9 4.5	123 133
Notice	PR-CAN-NOTF	The Registry	Network Operator	Notice	131	N/A	131
Notice	NOT-NODB	The Registry	Network Operator	Notice	61	N/A	61
Notice	NOT-NODB-NOCHNG	Network Operator	The Registry	Notice	61	N/A	61
Notice	WDR-HSD	Participant	The Registry	Notice	57	N/A	57

8.8.3 Error Correction Notice for New Connection and Permanent Removal (ECNND)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, GBO Id of participant, type of transaction to be corrected, Market Operator IRID of transaction to be corrected, date on which transaction to be corrected was completed (ccyy-mm-dd)

8.8.4 Error correction for New Connection and Permanent Removal Confirmation Notification (ECNND-CONF-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, type of transaction corrected, Market Operator IRID of transaction corrected, Initiating unique reference

8.8.5 Error Correction Notice For New Connection and Permanent Removal rejected (ECNND-REJ)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, type of transaction to be corrected, Market Operator IRID of transaction to be corrected, rejection reason, Initiating unique reference

8.8.6 Data change Notice (DCN)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: ALL OF: Notice Type, MIRN, MIRN Checksum, GBO Id of participant, Reason for change, Earliest Date of Change

AND ONE OF the following:

- New Gas Zone
- New Network Operator GBO Id,
- New Meter type
- New BL (South Australia Only)
- New HR (South Australia Only)

8.8.7 Request for bulk Market Operator Standing Data (REQ-BSD)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, GBO Id of participant, Any necessary supporting information

8.8.8 Notification of request for bulk standing Data rejected. (NOT-BSD-REJ)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, Market Operator GBO Id, Rejection Reason, Initiating Unique Reference

8.8.9 Notice of Market Operator GBO ID (NOT-GBO)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

Market Operator GBO Id

8.8.10 Multiple Data change Notice (DCN-MULT)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN (or range of MIRNs) with checksum(s). In practice, this may be defined by reference to another attribute. Eg. All MIRNs in a given sub-network.

GBO Id of participant, Effective date of change, Details of change, any necessary supporting information

8.8.11 Notification that Multiple Data change Notice is not appropriate (DCN-NO-MULT-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN (or range of MIRNs) with checksum(s), Market Operator GBO Id, Details of change, rejection reason, Initiating Unique Reference

8.8.12 Data change Notice Cancelled Notification (DCN-CAN-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, cancellation reason

8.8.13 Notice of new sub-network code (NOT-SNC)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

N/A. This is a rare event, which will be communicated to the RMA.

8.8.14 Notice of the time and date of Market Operator standing data generation (NOT-SDGEN)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, Market Operator GBO Id, Date and Time of Standing Data Generation, Initiating Unique Reference

8.8.15 Historical Market Operator standing data request (REQ-HSD)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, GBO Id of requesting participant MIRN, MIRN Checksum, Start date of Historic Request, End date of Historic Request

8.8.16 Notification that Historical Market Operator Standing Data request was rejected. (NOT-HSD-REJ)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, rejection reason, Initiating Unique Reference

8.8.17 Notice of no change made to registry entity (NOT-NOCHNG)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, Market Operator generated unique id of transaction, Initiating unique reference, rejection reason

8.8.18 Notice of invocation of ROLR scheme (NOT-ROLR)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

N/A. This is a rare event, communications will be handled by the RMA

8.8.19 Notification of ROLR transfer day (NOT-ROLR-TD)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, Market Operator GBO Id, date of ROLR invocation, details of ROLR event

8.8.20 Notice of change to GBO information (GBO-CHNG)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, GBO Id, Name of Person, Capacity in which person operates, Status of GBO Id, electronic address, fax number, office address, postal address, Effective Date

8.8.21 Notice of inactive GBO Id (GBO-STATUS-CHNG)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, GBO Id, capacity in which person operates, Status of GBO Id ('active', 'suspended' or 'deregistered')

8.8.22 Disconnection Cancelled Notification (DIS-CAN-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, cancellation reason

8.8.23 Reconnection Cancelled Notification (REC-CAN-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, cancellation reason

8.8.24 Permanent Removal Cancelled Notification (PR-CAN-NOTF)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, Market Operator GBO Id, cancellation reason

8.8.25 Notice of change required in network operator databases (NOT-NODB)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, Details of change

8.8.26 Notice of no change made to network operator databases (NOT-NODB-NOCHNG)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, Details of why change has not been applied

8.8.27 Withdraw historical Market Operator standing data request (WDR-HSD)

This flow is defined as a Notice. That is, an unstructured instruction, such as fax, email etc. No data format shall be provided since this is unstructured information that is not relevant to any electronic systems interface.

Required Data:

SUBJECT FIELD: Unique Reference

CONTENTS: Notice Type, MIRN, MIRN Checksum, GBO Id, Unique Reference of original historical standing data request

9 METER READINGS

9.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	Transaction Group	WA RMP Ref:	SA RMP Ref:	BS Ref.
MeterDataNotification		BSCMR	Network Operator	Market Operator DEE	aseXML	MDMT	162	3.7.3	162
MeterDataResponse		BSCMR-RESP	Market Operator DEE	Network Operator	AseXML	MDMT	165,166	3.8.3 3.8.4	165 166
Automated Electronic File		INTMR	Network Operator Market Operator DEE	Market Operator DEE Participants	Automated Electronic File	N/A	162, 228, 213, 215(2)(a)	3.7.3 8.6.13 N/A N/A	162 228 N/A N/A
Automated Electronic File		GPMD (WA)	Network Operator	Market Operator DEE	Automated Electronic File	N/A	152	N/A	152
Automated Electronic File		GPENG (WA only)	Pipeline Operator Market Operator DEE	Market Operator DEE Pipeline Operator User	Automated Electronic File	N/A	210, 211(1)(a)	N/A N/A	210 211
Automated Electronic File		GPMD (SA)	Network Operator	Market Operator DEE	Automated Electronic File	N/A	152(3)	3.3.2	152

9.2 Code Summary

This table is a complete list of those codes used within the *Meter Reading* section to uniquely identify each particular flow.

Identifier	Data Flow Name
BSCMR	Basic Meter Reading Data
BSCMR-RESP	Response to Basic Meter Reading Data
GPMD	Gate Point Metering Data
INTMR	Interval Meter Reading Data
GPENG	Gate Point Energy Inflow
BSCMR-RPT	Basic Meter Reading Data CSV report

9.3 Metering Data

9.3.1 MeterDataNotification Transaction

9.3.1.1 Physical Transaction

MeterDataNotification

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
RecordCount	integer(10)	Mandatory	Account of the number of records include in the CSV payload.	1..1	RecordCount	xsd:integer totalDig="10"
CSVConsumptionData	ComplexType	Mandatory	The CSV payload.	1..1	CSVConsumptionData	

The following describes the CSV contents of the data element CSVConsumptionData.

Heading	Usage	Usage/ Comments
NMI	Mandatory	The MIRN for which the energy data is missing
NMI_CHECKSUM	Mandatory	The MIRN checksum
RB_REFERENCE_NUMBER	Not Required	N/A
REASON_FOR_READ	Not Required	N/A
GAS_METER_NUMBER	Not Required	N/A
GAS_METER_UNITS	Not Required	N/A
PREVIOUS_INDEX_VALUE	Not Required	N/A
PREVIOUS_READ_DATE	Mandatory	The date that the previous reading for the MIRN was taken. Ccyy-mm-dd
CURRENT_INDEX_VALUE	Not Required	N/A
CURRENT_READ_DATE	Mandatory	The date that the current reading for the MIRN was physically read. Ccyy-mm-dd
VOLUME_FLOW	Not Required	N/A
AVERAGE_HEATING_VALUE	Not Required	N/A
PRESSURE_CORRECTION_FACTOR	Not Required	N/A
CONSUMED_ENERGY	Mandatory	Energy flow measured in megajoules.
TYPE_OF_READ	Mandatory	The type of the reading for the meter. "A" – Actual "E" – Estimated "S" – substituted "D" – Deemed
ESTIMATION_SUBSTITUTION_TYPE	Not Required	N/A
ESTIMATION_SUBSTITUTION_REASON_CODE	Not Required	N/A
METER_STATUS	Not Required	N/A
NEXT_SCHEDULED_READ_DATE	Not Required	N/A
HI_LOW_FAILURE	Not Required	N/A
METER_CAPACITY_FAILURE	Not Required	N/A

Heading	Usage	Usage/ Comments
ADJUSTMENT_REASON_CODE	Not Required	N/A
ENERGY_CALCULATION_DATESTAMP	Not Required	N/A
ENERGY_CALCULATION_TIME_STAMP	Not Required	N/A

9.3.1.2 Data flow Definition: Basic Meter Read Data (BSCMR)

This flow provides a means for the network operator to provide the data estimation entity with basic meter energy values. This data is provided according to the schedule specified in the Retail Market Procedures.

9.3.1.2.1 AseXML Example Transaction

```
<MeterDataNotification version="r25">
  <RecordCount>4</RecordCount>
  <CSVConsumptionData>
    NMI,NMI_Checksum,Previous_Read_Date,Current_Read_Date,Consumed_Energy,Type_of_Read
    5000000006,5,2002-01-01,2002-02-01,1000,A
    5000000006,5,2004-02-01,2004-04-01,1000,A
    5000000006,5,2004-02-01,2004-06-01,1000,A
    5000000006,5,2004-08-01,2004-10-01,1000,A
    5000000006,5,2004-10-01,2004-12-01,1000,A
  </CSVConsumptionData>
</MeterDataNotification>
```

9.3.1.2.2 Event Codes

Event Code Number
3204, 2127,2128, 3205, 3207, 3208, 3214, 3216, 5013

Note: In all cases the severity of each event will be “Error”.

9.3.2 MeterDataResponse Transaction

9.3.2.1 Physical Transaction

MeterDataResponse

Data Element	Format	Usage	Usage/ Comments	AseXML		
				Occurs	Element Path	Data Type
ActivityId	Numeric(10)	Mandatory	The unique ID assigned by AEMO to the reading data.	1	ActivityId	xsd:nonNegativeIntege
AcceptedCount	Numeric(10)	Mandatory	The number of accepted meter readings.	1	AcceptedCount	xsd:nonNegativeIntege
Load Date	Date(10)	Mandatory	The date that the meter readings were processed.	1	LoadCount	xsd:dateTime
Event	Complex Type	Optional	Any errors are reported via the Event element. See 9.3.1.2.2 for codes	0..n	Event	Complex Type – Event

9.3.2.2 Data flow Definition:Response to Basic Meter Read Data (BSCMR-RESP)

The data estimation entity to notify the network operator of the result of the basic meter read data to the schedule specified in the Procedures

9.3.2.2.1 AseXML Example Transaction

Load Successful:

```
<MeterDataResponse version="r29">
  <ActivityID>5</ActivityID>
  <AcceptedCount>21</AcceptedCount>
  <LoadDate>2004-02-04T12:00:00.000+10:00</LoadDate>
</MeterDataResponse>
```

Load Partially Successful:

```
<MeterDataResponse version="r29">
  <ActivityID>123</ActivityID>
  <AcceptedCount>2</AcceptedCount>
  <LoadDate>2004-02-04T12:00:00.000+10:00</LoadDate>
  <Event class="Application" severity="Error">
    <Code description="Invalid DPI">3209</Code>
    <KeyInfo>5000000006,5,2004-01-01,2004-01-02,1000,A</KeyInfo>
    <Context>5000000006</Context>
    <Explanation>The Specified DPI could not be found in the system</Explanation>
  </Event>
  <Event class="Application" severity="Error">
    <Code description="Invalid Gas Date Format">3216</Code>
    <KeyInfo>5000000006,5,THURSDAY,2004-01-02,1000,A</KeyInfo>
    <Context>5000000006</Context>
    <Explanation>The supplied GasDate String could not be converted to a Date</Explanation>
  </Event>
  <Event class="Application" severity="Error">
    <Code description="Invalid Gas Date Format">3216</Code>
    <KeyInfo>5000000006,5,2004-01-01,2004/01/02,1000,A</KeyInfo>
    <Context>5000000006</Context>
    <Explanation>The supplied GasDate String could not be converted to a Date</Explanation>
  </Event>
  <Event class="Application" severity="Error">
    <Code description="Invalid value for reading">3214</Code>
    <KeyInfo>5000000006,5,2004-01-01,2004-01-02,A,asdewsdfffgggg</KeyInfo>
    <Context> asdewsdfffgggg</Context>
    <Explanation>The supplied reading value could not be converted to an integer value</Explanation>
  </Event>
  <Event class="Application" severity="Error">
    <Code description="Invalid Meter Reading type">3208</Code>
    <KeyInfo>5000000006,5,2004-01-01,2004-01-02,Z,1000</KeyInfo>
    <Context>Z</Context>
    <Explanation>The Meter Reading type must be one of A,E,S,X</Explanation>
  </Event>
  <Event class="Application" severity="Error">
```

```
meter
    <Code description="Reading of better quality for this metering period already exists for this
">3676</Code>
    <KeyInfo>50000000006,5,2004-01-01,2004-01-02,Z,1000</KeyInfo>
    <Context>1000|Z</Context>
    <Explanation>Reading of better quality for this metering period already exists for this meter
</Explanation>
    </Event>
</MeterDataResponse>
```

9.3.3 Interval Meter Read Data (INTMR)

9.3.3.1 Data flow Definition

The network operator to notify the data estimation entity of interval meter read data on and hourly and daily basis to the schedule specified in the Procedures.

9.3.3.2 Physical Mapping

The data for this flow must be provided in an automated electronic file. The appropriate acknowledgement holds all the events associated with the processing of the interval meter reading file. There is no message similar to “BSCMR-RESP” as this is covered by the acknowledgement mechanism. Note that for Interval Meters ‘GAS_DAY’ means the day to which the hourly consumption data relates.

Physical Name	Optionality
MIRN	1
MIRN_CHECKSUM	1
GAS_DAY	1
SUB_NETWORK_ID	1
CONSUMPTION_HR01	1
CONSUMPTION_HR02	1
CONSUMPTION_HR03	1
CONSUMPTION_HR04	1
CONSUMPTION_HR05	1
CONSUMPTION_HR06	1
CONSUMPTION_HR07	1
CONSUMPTION_HR08	1
CONSUMPTION_HR09	1
CONSUMPTION_HR10	1

Physical Name	Optionality
CONSUMPTION_HR11	1
CONSUMPTION_HR12	1
CONSUMPTION_HR13	1
CONSUMPTION_HR14	1
CONSUMPTION_HR15	1
CONSUMPTION_HR16	1
CONSUMPTION_HR17	1
CONSUMPTION_HR18	1
CONSUMPTION_HR19	1
CONSUMPTION_HR20	1
CONSUMPTION_HR21	1
CONSUMPTION_HR22	1
CONSUMPTION_HR23	1
CONSUMPTION_HR24	1
TOTAL_DAILY_CONSUMPTION	1
TYPE_OF_READ	1

9.3.3.3 Event Codes

Event Code Number
5200, 5202, 5403, 5601, 5604, 5605, 5606, 5609

9.3.3.4 Examples

9.3.3.4.1 During gas day

MIRN, MIRN_CHECKSUM, GAS_DAY, SUB-NETWORK-ID,
 CONSUMPTION_HR01, CONSUMPTION_HR02, CONSUMPTION_HR03, CONSUMPTION_HR04, CONSUMPTION_HR05, CONSUMPTION_HR06, CONSU

Physical Name	Optionality
ENERGY_HR03	0-1
ENERGY_HR04	0-1
ENERGY_HR05	0-1
ENERGY_HR06	0-1
ENERGY_HR07	0-1
ENERGY_HR08	0-1
ENERGY_HR09	0-1
ENERGY_HR10	0-1
ENERGY_HR11	0-1
ENERGY_HR12	0-1
ENERGY_HR13	0-1
ENERGY_HR14	0-1
ENERGY_HR15	0-1
ENERGY_HR16	0-1
ENERGY_HR17	0-1
ENERGY_HR18	0-1
ENERGY_HR19	0-1
ENERGY_HR20	0-1
ENERGY_HR21	0-1
ENERGY_HR22	0-1
ENERGY_HR23	0-1
ENERGY_HR24	0-1
ENERGY	0-1

9.3.4.3 Event Codes

Event Code Number
5200, 5202, 5403, 5601, 5603, 5608, 5609

9.3.4.4 Examples

`GATE_POINT_ID,GAS_DAY,ENERGY_HR01,ENERGY_HR02,ENERGY_HR03,ENERGY_HR04,ENERGY_HR05,ENERGY_HR06,ENERGY_HR07,ENERGY_HR08,ENERGY_HR09,ENERGY_HR10,ENERGY_HR11,ENERGY_HR12,ENERGY_HR13,ENERGY_HR14,ENERGY_HR15,ENERGY_HR16,ENERGY_HR17,ENERGY_HR18,ENERGY_HR19,ENERGY_HR20,ENERGY_HR21,ENERGY_HR22,ENERGY_HR23,ENERGY_HR24,ENERGY_1101D,2003-10-01,10,20,30,40,50,60,70,80,90,100,110,120,130,140,150,160,170,180,190,200,210,220,230,240,3000`
`1102D,2003-10-01,`
`300,6600`

9.3.5 Gate Point Metering Data (GPMD) (SA)

9.3.5.1 Data flow Definition

The network operator to notify the data estimation entity of the metering data for each gate point for the gas day.

9.3.5.2 Physical Mapping

The data for this flow must be provided in as an automated electronic file.

Physical Name	Optionality
GATE_POINT_ID	1
GAS_DAY	1
ENERGY_HR01	0-1
ENERGY_HR02	0-1
ENERGY_HR03	0-1

Physical Name	Optionality
ENERGY_HR04	0-1
ENERGY_HR05	0-1
ENERGY_HR06	0-1
ENERGY_HR07	0-1
ENERGY_HR08	0-1
ENERGY_HR09	0-1
ENERGY_HR10	0-1
ENERGY_HR11	0-1
ENERGY_HR12	0-1
ENERGY_HR13	0-1
ENERGY_HR14	0-1
ENERGY_HR15	0-1
ENERGY_HR16	0-1
ENERGY_HR17	0-1
ENERGY_HR18	0-1
ENERGY_HR19	0-1
ENERGY_HR20	0-1
ENERGY_HR21	0-1
ENERGY_HR22	0-1
ENERGY_HR23	0-1
ENERGY_HR24	0-1
ENERGY	0-1
READ_TYPE_FLAG	1



9.3.5.3 Event Codes

Event Code Number
5200, 5202, 5403, 5601, 5603, 5608, 5609

9.3.5.4 Examples

```
GATE_POINT_ID,GAS_DAY,ENERGY_HR01,ENERGY_HR02,ENERGY_HR03,ENERGY_HR04,ENERGY_HR05,ENERGY_HR06,ENERGY_HR07,ENERGY_HR08,ENERGY_HR09,ENERGY_HR10,ENERGY_HR11,ENERGY_HR12,ENERGY_HR13,ENERGY_HR14,ENERGY_HR15,ENERGY_HR16,ENERGY_HR17,ENERGY_HR18,ENERGY_HR19,ENERGY_HR20,ENERGY_HR21,ENERGY_HR22,ENERGY_HR23,ENERGY_HR24,ENERGY_READ_TYPE_FLAG
1101D,2003-10-01,10,20,30,40,50,60,70,80,90,100,110,120,130,140,150,160,170,180,190,200,210,220,230,240,3000,A
1102D,2003-10-01,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,6600,E
```

9.3.6 Gate Point Energy Inflow (GPENG) (WA Only)

Note: No longer generated in SA from 29-June-2018

9.3.6.1 Data flow Definition

The pipeline operator to provide the data estimation entity with hourly gate point energy inflow for each sub-network.

9.3.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GATE_POINT_ID	1
GAS_DAY	1

Physical Name	Optionality
ENERGY_INFLOW_HR01	0-1
ENERGY_INFLOW_HR02	0-1
ENERGY_INFLOW_HR03	0-1
ENERGY_INFLOW_HR04	0-1
ENERGY_INFLOW_HR05	0-1
ENERGY_INFLOW_HR06	0-1
ENERGY_INFLOW_HR07	0-1
ENERGY_INFLOW_HR08	0-1
ENERGY_INFLOW_HR09	0-1
ENERGY_INFLOW_HR10	0-1
ENERGY_INFLOW_HR11	0-1
ENERGY_INFLOW_HR12	0-1
ENERGY_INFLOW_HR13	0-1
ENERGY_INFLOW_HR14	0-1
ENERGY_INFLOW_HR15	0-1
ENERGY_INFLOW_HR16	0-1
ENERGY_INFLOW_HR17	0-1
ENERGY_INFLOW_HR18	0-1
ENERGY_INFLOW_HR19	0-1
ENERGY_INFLOW_HR20	0-1
ENERGY_INFLOW_HR21	0-1
ENERGY_INFLOW_HR22	0-1
ENERGY_INFLOW_HR23	0-1
ENERGY_INFLOW_HR24	0-1



Physical Name	Optionality
MIRN	1
PREVIOUS_READ_DATE	1
CURRENT_READ_DATE	1
TYPE_OF_READ	1
CONSUMED_ENERGY	1
REPORT_DATE	1

9.3.7.3 Note: TYPE_OF_READ = A Actual, E Estimated, S Substituted, D Deemed

9.3.7.4 Event Codes

Event Code Number
No event codes as report is outgoing.

9.3.7.5 Examples

MIRN, PREVIOUS_READ_DATE, CURRENT_READ_DATE, TYPE_OF_READ, CONSUMED_ENERGY, REPORT_DATE
 5101010101, 2010-03-05, 2010-06-08, A, 12345, 2010-07-30
 5102020202, 2010-02-27, 2010-05-30, A, 23465, 2010-07-30

10 BALANCING, ALLOCATION, AND RECONCILIATION

10.1 Transaction Mapping

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Automated Electronic File		UAI	User	Market Operator DEE	Automated Electronic File	188(1) 189(1)	8.3.2 8.3.3	189
Automated Electronic File		UA-SHP	Market Operator DEE	Shipper	Automated Electronic File	192(2)	8.3.5	192
Automated Electronic File		UAI-SUBS	Market Operator DEE	User	Automated Electronic File	192	8.3.5	192
Automated Electronic File		UAI-INV	Market Operator DEE	User	Automated Electronic File	192	8.3.5	192
Notice		NOT-UAI-USR	Market Operator GRMS Ops	Market Operator RMA	Notice	192(2)	8.3.5	192
Notice		SHPREGLST	Swing service Provider, Shipper	Market Operator GRMS Ops	Notice	173(2)	8.1.3	173
Notice		SHPRPTREQ	Pipeline Operator	Market Operator DEE	Notice	173(6)	8.1.3	173
Bulk electronic file		SHPREGRPT	Market Operator DEE	Pipeline Operator	Bulk electronic file	173(6)	8.1.3	173
Notice		SHPREGRMV	Pipeline Operator	Market Operator DEE	Notice	173(10)	8.1.3	173

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Notice		PROF	Market Operator RMA	Market Operator DEE	Notice	200(1) 209(1)	N/A N/A	200 209
Automated Electronic File		PIPPRF	Pipeline Operator	Market Operator DEE	Automated Electronic File	176	N/A	176
Automated Electronic File		PIPRATIO	Market Operator DEE	Pipeline Operator	Automated Electronic File	176	N/A	176
Automated Electronic File		UPNA	User	Market Operator DEE	Automated Electronic File	197(2) 184	N/A N/A	197 184
Automated Electronic File		NPN	Market Operator DEE	User, Shipper, Network Operator, Pipeline Operator, Swing Service Provider	Automated Electronic File	199 212	N/A N/A	199 212
Automated Electronic File		PPN	Market Operator DEE	User, Shipper, Network Operator, Pipeline Operator, Swing Service Provider	Automated Electronic File	199	N/A	199

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Automated Electronic File		FUAFG	Network Operator	Market Operator DEE	Automated Electronic File	201(1)	8.4.1	201
Automated Electronic File		AUIW	User	Market Operator DEE	Automated Electronic File	202(1) 185(1)&(2))	8.4.2 8.2.4	202 185
Automated Electronic File		IMDPROF	User	Market Operator DEE	Automated Electronic File	202(1) 185(1)&(2))	8.4.2 8.2.4	202 185
Automated Electronic File		NPF	Market Operator DEE	User, Shipper, Pipeline Operator, Swing Service Provider	Automated Electronic File	205(4)(a)	8.4.5	N/A
Automated Electronic File		UPF	Market Operator DEE	User	Automated Electronic File	204(3)	8.4.4	N/A
Automated Electronic File		PPF	Market Operator DEE	Shipper, Pipeline Operator, Swing Service Provider	Automated Electronic File	206(2) 207	8.4.6 8.4.7	N/A N/A
Automated Electronic File		GPENGPROF (WA only)	Market Operator RMA	User, Pipeline operator	Automated Electronic File	211(1), 215(1)	N/A	N/A N/A

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Automated Electronic File		ECA Not generated in SA from 29/09/2018	Market Operator RMA	User	Automated Electronic File	215(2)(b)		5.9.7
Automated Electronic File		UUAFG	Network Operator	Market Operator DEE	Automated Electronic File	229	8.6.14	229
Automated Electronic File		RUAFG	Market Operator DEE	Network Operator	Automated Electronic File	223(2)(c)	8.6.5	223
Automated Electronic File		AUAFG	Market Operator DEE	Network Operator	Automated Electronic File	230(2), 244(a), (d) & (e), 240(2)	8.6.15 N/A N/A	230 244 240
Automated Electronic File		UETW	Market Operator DEE	User	Automated Electronic File	228(2)	8.6.13	228
Automated Electronic File		HDD	Market Operator DEE	User Network Operator	Automated Electronic File	204(4)(b) 216(1) (d) 228(4)	8.4.4 N/A 8.6.13	204 216 228
Automated Electronic File		TRA	Market Operator DEE	User Network Operator	Automated Electronic File	230(2), 244(a), (d) & (e), 240(2)	8.6.15 N/A N/A	N/A
Automated Electronic File		GAA	Market Operator DEE	User Network Operator Pipeline Operator	Automated Electronic File	230(2), 244(a), (d) & (e), 240(2)	8.6.15 N/A N/A	N/A
Automated Electronic File		UHRA	Market Operator DEE	User	Automated Electronic File	230(2),	8.6.15 N/A	N/A

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
						244(a), (d) & (e), 240(2)	N/A	
Notice		MRA-NOTF	Market Operator RMA	Market Operator DEE	Notice	239	N/A	239
Automated Electronic File		NORM-NSL	Market Operator DEE	User, Network Operator	Automated Electronic File	230(2), 244(1)(a), (d) (e), (f) & (g), 240(2)	8.6.15 N/A N/A	230(2)
Automated Electronic File		DI	Market Operator DEE	Shipper, Pipeline Operator Swing Service Provider	Automated Electronic File	246	8.7	246
Automated Electronic File		UDW	Market Operator DEE	User	Automated Electronic File	248	N/A	N/A
Automated Electronic File		UHSA	Market Operator DEE	User	Automated Electronic File	252(1)	N/A	N/A
Automated Electronic File		SHGA	Market Operator DEE	Shipper Swing Service Provider Pipeline Operator	Automated Electronic File	252(2)	N/A	N/A
Automated Electronic File		SS	Market Operator DEE	User,	Automated Electronic File	296, 300, 277(2)	N/A	N/A

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
				Pipeline Operator Network Operator Shipper				
Automated Electronic File		USS	Market Operator DEE	User	Automated Electronic File	296, 300	N/A	N/A
Automated Electronic File		OMP-USR	User	Market Operator DEE	Automated Electronic File	267	N/A	N/A
Automated Electronic File		OMP-SSP	Swing Service Provider	Market Operator DEE	Automated Electronic File	268	N/A	N/A
Automated Electronic File		OMP-SURPLUS	Swing Service Provider	Market Operator DEE	Automated Electronic File	281	N/A	N/A
Automated Electronic File		OMP-STATUS	Market Operator DEE	Swing Service Provider and User	Automated Electronic File	269(2)	N/A	N/A
Automated Electronic File		BID-SSP	Swing Service Provider	Market Operator DEE	Automated Electronic File	281	N/A	N/A
Automated Electronic File		BID-PUB	Market Operator DEE	Swing Service Provider and User Participant	Automated Electronic File	296, 300 277	N/A N/A N/A	N/A N/A N/A

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Automated Electronic File		MCP-TSS	Market Operator DEE	Swing Service Provider and User Participant	Automated Electronic File	296,300 277	N/A N/A N/A	N/A N/A N/A
Automated Electronic File		MCP-TANUSA	Market Operator DEE	Swing Service Provider and User Participant	Automated Electronic File	296, 300 277	N/A N/A N/A	N/A N/A N/A
Automated Electronic File		BID-ALLOC	Market Operator DEE	Swing Service Provider and User	Automated Electronic File	296, 300	N/A N/A	N/A N/A
Automated Electronic File		SRQ	Market Operator DEE	User	Automated Electronic File	299	N/A	N/A
Automated Electronic File		OMP-APP	Market Operator DEE	Swing Service Provider and User	Automated Electronic File	296, 300	N/A N/A	N/A N/A
Automated Electronic File		MILP	Market Operator DEE	User	Automated Electronic File	184A	8.2.3	N/A
Automated Electronic File		DGQ	Market Operator DEE	Pipeline Operator, Shipper and Swing Service Provider	Automated Electronic File	302(3)	8.9.1	302(3)

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Automated Electronic File		PCI-HST	Market Operator DEE	User Network Operator	Automated Electronic File	244(3)	N/A	N/A
Automated Electronic File		UETW-HST	Market Operator DEE	User Network Operator	Automated Electronic File	244(1)(h)	N/A	N/A
Notice		CALC-REQUEST	Market Operator RMA	Market Operator GRMS Ops	Notice	301A	N/A	301A
Notice		GEN-NOTIFY	Market operator DEE	User, ROLR, Network Operator, Shipper, Pipeline Operator Swing Service Provider	Notice	301A	N/A	301A
Notice		SASP-NOTIFY	Market Operator	GRMS	Notice		TBA	TBA
Notice		EASP-NOTIFY	Market Operator	GRMS	Notice		TBA	TBA
Notice		ASPDATA	GRMS	Appointed Independent Reviewer or Independent Expert	Notice		TBA	TBA

Physical Transaction	Variation	Logical Flow Short Name	From	To	Transaction Type	WA RMP Ref:	SA RMP Ref	BS Ref.
Notice		RECALC-REQUEST	Market Operator	GRMS	Notice	301(B), 301(C)	N/A N/A	N/A 301(C)
Notice		SS-OVERTHRES	GRMS	Market Operator	Notice	301(B)	N/A	N/A
Notice		GPMD-DIFFOVER	GRMS	Market Operator	Notice	301(C)	N/A	301(C)
Notice		GPMD-ESTREPREQ	Market Operator	GRMS	Notice	152(3)	3.3.2	152(3)
Notice		GPMD-ESTREPORT	GRMS	Market Operator	Notice	301(2)	8.8.1	301(2)

10.2 Code Summary

This table is a complete list of those codes used within the Balancing, Allocation and Reconciliation section to uniquely identify each particular flow.

Identifier	Data Flow Name
AUAFG	Actual Unaccounted For Gas
AUIW	Anticipated User Interval Withdrawal
BID-ALLOC	Notification of Swing Service Allocation through the Bid Stack
BID-PUB	Bid Stack Publication

Identifier	Data Flow Name
BID-SSP	Swing Service Bids
DI	Deemed Injections
ECA	Estimated Consumption Amount
CALC-REQUEST	Request for Suspension of BAR calculations
GEN-NOTIFY	General Notification
FUAFG	Forecast unaccounted for gas
GAA	Gate Point Adjustment Amount
GPENGPROF	Gate Point Energy and Profile
HDD	Heating Degree Day
IMDPROF	Interval-Meter Demand Profile
MCP-TANUSA	The MCP for the total of all adjusted non-user-specific amounts of Swing Service to be procured through the bid stack. ("marginal clearing price for the total of all adjusted socialised amounts of swing service" in SA)
MCP-TSS	Marginal clearing price (MCP) for the total amount of Swing Service to be procured through the bid stack
MRA-NOTF	Miscellaneous Reconciliation Amount
NORM-NSL	Normalisation Factor and Net System Load
NOT-UAI-USR	User Allocation Instruction - Use Shipper Register
NPF	Sub-Network Profile Forecast
NPN	Sub-network Profiled Nomination
OMP-APP	Applied Off-market service procurement
OMP-SSP	Swing Service Provider off-market service procurement
OMP-STATUS	Off-market service procurement instruction Status
OMP-SURPLUS	Swing Service Provider off-market service procurement surplus instruction
OMP-USR	User off-market service procurement
PIPPRF	Pipeline Profile
PIPRATIO	Pipeline Ratio

Identifier	Data Flow Name
PPF	Participant Profile Forecast
PPN	Pipeline Profiled Nomination
PROF	Profile
PUSA	Notice of Penalty User-Specific Amount of Swing Service
RUAFG	Revised User's unaccounted for gas
SHGA	Shippers hourly gate point apportionment
SHPREGLST	Shipper Register Listing Request
SHPREGRMV	Shipper Register Removal
SHPREGRPT	Shipper Registration Report
SHPRPTREQ	Shipper Registration Report Request
SRQ	Swing Service Repayment Quantity
SS	Swing Service
TRA	User's total reconciliation amount
UAI	User Allocation Instruction
UAI-INV	Invalid User Allocation Instruction
UAI-SUBS	Notification about substituted user allocation instruction
UA-SHP	User Allocation for a Shipper
UDW	User's total deemed withdrawal
UETW	User's estimated total withdrawal
UHSA	User's hourly sub network apportionment
UHRA	User's Historical Gas Day Reconciliation Amounts
UPF	User's Profile Forecast
UPNA	User's Pipeline Nomination
USS	User's swing service amounts
UUAFG	User's unaccounted for gas

Identifier	Data Flow Name
MILP	Monthly Interval-Meter Load Percentage
DGQ	Deemed Gas Quantity
PCI-HST	Historical pipeline injection data
UETW-HST	Historical user withdrawal data
SASP-NOTIFY	Start of Alternative Settlement Period Notification
EASP-NOTIFY	End of Alternative Settlement Period Notification
ASPDATA	ASPDATA Report
RECALC-REQUEST	Request to Recalculate
SS-OVERTHRES	Swing Service Over Threshold and Calculated With Estimated GPMD
GPMD-DIFFOVER	Difference between Estimated and Actual GPMD Values Exceeds Threshold
GPMD-ESTREPREQ	Request for Estimate Usage in Market Calculation Report
GPMD-ESTREPORT	Estimate Usage in Market Calculation Report

10.3 Allocation Instruction

10.3.1 User Allocation Instruction (UAI)

10.3.1.1 Data flow Definition

The user to provide to the data estimation entity their allocation instruction for the gas day which specifies the amount or percentage of the user's expected requirement of gas for the day that is allocated to the shipper's who inject gas into the sub-network for the user.

A user allocation instruction set are the instruction for the same user, sub-network and gas day.

With the introduction of the STTM in the SA Market the allocation instructions applies only to the non-STTM sub-networks. Therefore, any allocation instruction fields for the Adelaide metro sub-network (2101) will always contain 0.

A user allocation instruction set received by GRMS would replace any user allocation instruction set for the same combination of user, sub-network and gas day previously received by GRMS.

Each instruction in a user allocation instruction set has to be valid for the user allocation instruction set to be valid.

10.3.1.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SHIPPER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
ALLOCATION_PRECEDENCE	1
ALLOCATION_TYPE	1
ALLOCATION	1

10.3.1.3 Event Codes

Event Code Number
5200, 5204, 5207, 5208, 5213, 5217, 5220, 5400, 5403, 5607, 5202, 5601

Note: In all cases the severity of each event will be "Error".

10.3.1.4 Example

USER_GBO_ID, SHIPPER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, ALLOCATION_PRECEDENCE, ALLOCATION_TYPE, ALLOCATION
 USR1, SHP1, 1101, 2003-10-10, 1, P, 25

USR1, SHP2, 1101, 2003-10-10, 2, P, 30
USR1, SHP3, 1101, 2003-10-10, 3, P, 30
USR1, SHP4, 1101, 2003-10-10, 4, P, 15
USR1, SHP1, 1101, 2003-10-11, 1, Q, 5500
USR1, SHP2, 1101, 2003-10-11, 2, Q, 4300
USR1, SHP3, 1101, 2003-10-11, 3, P, 50
USR1, SHP4, 1101, 2003-10-11, 4, P, 50
USR1, SHP1, 1101, 2003-10-12, 1, Q, 6700
USR1, SHP2, 1101, 2003-10-12, 2, Q, 4300
USR1, SHP4, 1101, 2003-10-12, 3, P, 100

10.3.1.5 GRMS validation procedure

The header of the csv file defines the columns. Each line in the flow represents a user allocation request. All allocation requests in the message are grouped by:

- USER_GBO_ID
- SUB_NETWORK_ID
- GAS_DAY

To create a user allocation instruction for the user, the gas day and the sub-network, first the user allocation instruction (the group) is validated as follows:

- the GAS_DAY column is validated
- the USER_GBO_ID column is validated
- the USER_GBO_ID is validated against the sender of the message
- the timeline for providing the information is validated

Then each of the user allocation requests is validated separately against the following criteria:

- the ALLOCATION_PRECEDENCE of the user allocation request has to be unique across the whole user allocation instruction (group). This also means that each of the user allocation requests has to have the ALLOCATION_PRECEDENCE populated
- the SHIPPER_GBO_ID gets validated
- the shipper is validated against the shippers register
- the ALLOCATION_TYPE is validated. It can be populated only to P-Percentage or Q-Quantity.
- The allocation precedence has to be a positive number
- The sum of the requests of type percentage has to be equal 100%.
- When the allocation type equals “Q” then the allocation must be greater than 0.

If the whole user allocation instruction or any the user allocation requests doesn't comply with the above specified criteria the user allocation

instruction (for the user, the gas day and the sub-network) is rejected with appropriate event code.

10.3.1.6 Invalid Example

The following is an example of an invalid UAI file:

```
USER_GBO_ID,SHIPPER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,ALLOCATION_  
PRECEDENCE,ALLOCATION_TYPE,ALLOCATION
```

```
USR1,SHP1,1101,2003-03-09,1,P,100
```

```
USR1,SHP1,1105,2003-03-09,1,P,100
```

```
USR1,SHP1,1106,2003-03-09,2,P,100
```

```
USR1,SHP2,1106,2003-03-09,1,Q,0
```

```
USR1,SHP1,1107,2003-03-09,1,P,100
```

```
USR1,SHP1,1108,2003-03-09,1,P,100
```

```
USR1,SHP1,1109,2003-03-09,1,P,100
```

```
USR1,SHP1,1110,2003-03-09,1,P,100
```

```
USR1,SHP1,1112,2003-03-09,1,P,100
```

In the above example if the yellow highlighted allocation was greater than zero, then this UAI would have passed the validation criteria

10.3.1.7 Processes

Refer to the BS for full details. The user allocation instruction is used in the following GRMS processes:

- Actual user allocation percentage
- Before the gas day
- South Australia forecasting methodology
- User's deemed withdrawal and Shippers/Swing Service provider's deemed injections
- User's hourly sub-network apportionment and Shippers/Swing Service provider's gate point apportionment

10.3.1.7.1 Actual user allocation percentage

The user allocation instruction is provided for a daily energy value. This means that the user allocation request provided by quantity has to be allocated among the daily value. To deal with this situation the Procedures describes how to derive the actual allocation proportion. This is described later in this section.

10.3.1.7.2 Before the gas day

The forecasting is the first business process for each of the gas days. During this process GRMS validates that it has a valid user allocation instruction for each user in each sub-network for the gas day (forecasted gas day). If it is missing then the user's allocation instruction is substituted for the gas day.

The user allocation instruction is then used appropriately in the forecasting for the SA sub-networks.

10.3.1.7.3 Forecasting for South Australia

In the forecasting process for South Australia, the forecasted values are allocated using the allocation instruction and actual allocation proportion as described later.

10.3.1.7.4 User's deemed withdrawal and Shippers/Swing Service provider's deemed injections

After the end of each gas day the GRMS system allocates the user's estimated total withdrawal less swing gas repayment amount to shippers using the user allocation instruction.

This process first allocates energy quantities to the shipper where the type of the allocation is quantity and in the order of the ALLOCATION_PRECEDENCE. The requests with the lowest precedence number will get applied first.

There could be three outcomes of this first stage of the process. Not all of the quantity requests are applied because there is not enough energy to allocate to all of the quantity requests. The exact UETW amount is allocated to quantity requests. Finally there could be some remaining quantity. This remaining quantity is allocated using the requests given by percentage.

Once the allocation is done the actual allocation proportion can be derived. The actual allocation proportion is the percentage of the quantity allocated to the request against the total quantity being allocated. This actual allocation proportion is used in the business process that allocates the hourly energy of data. Note that when the allocation instruction is given solely in percentages the actual allocation proportion is the same as the original percentages of the allocation instruction.

The actual allocation proportion is used during the forecasting for South Australia with one difference, it is derived by allocating the total forecasted energy value rather than the UETW value which is not known at the time of forecasting.

10.3.1.7.5 User's hourly sub-network apportionment and Shippers/Swing Service provider's gate point apportionment

This business process uses the actual allocation proportion to allocate the hourly sub-network apportionment for users to shippers.

10.3.2 User Allocation for a Shipper (UA-SHP)

10.3.2.1 Data flow Definition

Where the data estimation entity is required to allocate the user’s gas injections for a gas day because the user has not provided a valid user’s allocation instruction, the data estimation entity must inform each shipper that it has made allocations to of the user the allocation is for and the amount of the allocation.

10.3.2.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
ALLOCATION_TYPE	1
ALLOCATION	1

10.3.2.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

Note: In all cases the severity of each event will be “Error”.

10.3.2.4 Example

```
USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, ALLOCATION_TYPE, ALLOCATION
USR1, 1101, 2004-10-10, P, 50
USR2, 1101, 2004-10-10, P, 50
```

10.3.3 User Allocation Instruction – Used Shipper Register (NOT-UAI-USR)

10.3.3.1 Data flow Definition

Where the data estimation entity is required to allocate the user's gas injections for a gas day, because the user has not provided a valid user's allocation instruction, the data estimation entity must inform the RMA when it has used the method for determining the allocation that uses the shipper register.

10.3.3.2 Physical Mapping

The data for this flow must be provided in an notice.

Physical Name	Optionality
USER_GBO_ID	1
SHIPPER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
ALLOCATION	1
ALLOCATION_TYPE	1

10.3.4 Shipper Register Listing Request (SHPREGLST)

10.3.4.1 Data flow Definition

A shipper or swing service provider may request to be added or removed from the shipper's register. A pipeline operator may also request that a shipper or a swing service provider be removed from the shipper's register.

10.3.4.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
USER_GBO_ID	1
SHIPPER_GBO_ID	1
SUB_NETWORK_ID	1
NOTIFICATION_TYPE	1
EFFECTIVE_DATE	1

10.3.5 Shipper Register Removal (SHPREGRMV)

10.3.5.1 Data flow Definition

Where a pipeline operator has requested that a shipper or a swing service provider be removed from the shipper's register the data estimation entity must inform the shipper or a swing service provider

10.3.5.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
PARTICIPANT_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_OPR_GBO_ID	1
REMOVAL_REASON	1
EFFECTIVE_DATE	1

10.3.6 Shipper Register Report Request (SHPRPTREQ)

10.3.6.1 Data flow Definition

The notification used to request from the data estimation entity the report of the shipper's details from the shipper register.

10.3.6.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
PIPELINE_ID	1
SUB_NETWORK_ID	1

10.3.7 Shipper Register Report (SHPREGRPT)

10.3.7.1 Data flow Definition

The data estimation entity to provide on request the shipper's details from the shipper register.

10.3.7.2 Physical Mapping

The data for this flow must be provided in an Bulk electronic file.

Physical Name	Optionality
PIPELINE_ID	1
SUB_NETWORK_ID	1
SHIPPER_GBO_ID	1

10.3.7.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.3.7.4 Example

```
PIPELINE_ID,SUB_NETWORK_ID,SHIPPER_GBO_ID  
P,1101,SH1  
P,1101,SH2  
P,1102,SH3
```

10.3.8 Substituted User Allocation Instruction (UAI-SUBS)

10.3.8.1 Data flow Definition

The data estimation entity to provide information about substituted user allocation instruction to the user.

10.3.8.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SHIPPER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
SUBS_METHOD	1
ALLOCATION_PRECEDENCE	1
ALLOCATION_TYPE	1
ALLOCATION	1

10.3.8.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

Note: In all cases the severity of each event will be “Error”.

10.3.8.4 Example

```

USER_GBO_ID,SHIPPER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,SUBS_METHOD
,ALLOCATION_PRECEDENCE,ALLOCATION_TYPE,ALLOCATION
USR1,SH1,1101,2003-10-10,D,1,P,25
USR1,SH2,1101,2003-10-10,D,2,P,30
USR1,SH3,1101,2003-10-10,D,3,P,30
USR1,SH4,1101,2003-10-10,D,4,P,15
USR1,SH3,1103,2003-10-11,E,1,P,50
USR1,SH4,1103,2003-10-11,E,2,P,50
  
```

10.3.9 User Allocation Instruction Invalid (UAI-INV)

10.3.9.1 Data flow Definition

When the data estimation entity is required to update the shippers register, the data estimation entity must re-validate all users allocation instructions it holds from any day after the effective from date of the change. If during this process any of the assessed user allocation instructions become invalid, the data estimation entity has to notify the user about these circumstances.

10.3.9.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1

10.3.9.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

Note: In all cases the severity of each event will be “Error”.

10.3.9.4 Example

```
USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY  
USR1, 1101, 2003-10-10  
USR1, 1101, 2003-10-10  
USR1, 1101, 2003-10-10  
USR1, 1101, 2003-10-10  
USR1, 1103, 2003-10-11  
USR1, 1103, 2003-10-11
```

10.4 Before the Gas Day

10.4.1 Profile (PROF)

10.4.1.1 Data flow Definition

The RMA to notify the data estimation entity of changes in profile

10.4.1.2 Physical Mapping

The data for this flow must be provided in a Bulk electronic file.

Physical Name	Optionality
PROFILE_HR01	1
PROFILE_HR02	1
PROFILE_HR03	1
PROFILE_HR04	1
PROFILE_HR05	1
PROFILE_HR06	1
PROFILE_HR07	1
PROFILE_HR08	1
PROFILE_HR09	1
PROFILE_HR10	1
PROFILE_HR11	1
PROFILE_HR12	1
PROFILE_HR13	1
PROFILE_HR14	1
PROFILE_HR15	1
PROFILE_HR16	1
PROFILE_HR17	1
PROFILE_HR18	1
PROFILE_HR19	1
PROFILE_HR20	1
PROFILE_HR21	1
PROFILE_HR22	1
PROFILE_HR23	1
PROFILE_HR24	1

10.4.1.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.4.1.4 Example

PROFILE_HR01, PROFILE_HR02, PROFILE_HR03, PROFILE_HR04, PROFILE_HR05, PROFILE_HR06, PROFILE_HR07, PROFILE_HR08, PROFILE_HR09, PROFILE_HR10, PROFILE_HR11, PROFILE_HR12, PROFILE_HR13, PROFILE_HR14, PROFILE_HR15, PROFILE_HR16, PROFILE_HR17, PROFILE_HR18, PROFILE_HR19, PROFILE_HR20, PROFILE_HR21, PROFILE_HR22, PROFILE_HR23, PROFILE_HR24

LE_HR10, PROFILE_HR11, PROFILE_HR12, PROFILE_HR13, PROFILE_HR14, P
ROFILE_HR15, PROFILE_HR16, PROFILE_HR17, PROFILE_HR18, PROFILE_HR
19, PROFILE_HR20, PROFILE_HR21, PROFILE_HR22, PROFILE_HR23, PROFIL
E_HR24
1,1,5,5,5,6,7,7,7,12,12,8,5,6,5,2,2,1,1,1,1,0,0,0

10.4.2 Pipeline Profile (PIPPRF)

10.4.2.1 Data flow Definition

The pipeline operator to notify the data estimation entity of the profile that it will use for a pipeline for a sub-network for a gas day.

10.4.2.2 Physical Mapping

The data for this flow must be provided in a automated electronic file.

Physical Name	Optionality
PIPELINE_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILE_HR01	1
PROFILE_HR02	1
PROFILE_HR03	1
PROFILE_HR04	1
PROFILE_HR05	1
PROFILE_HR06	1
PROFILE_HR07	1
PROFILE_HR08	1
PROFILE_HR09	1
PROFILE_HR10	1
PROFILE_HR11	1
PROFILE_HR12	1
PROFILE_HR13	1
PROFILE_HR14	1
PROFILE_HR15	1
PROFILE_HR16	1
PROFILE_HR17	1
PROFILE_HR18	1
PROFILE_HR19	1
PROFILE_HR20	1
PROFILE_HR21	1
PROFILE_HR22	1
PROFILE_HR23	1
PROFILE_HR24	1

10.4.2.3 Event Codes

Event Code Number
5200, 5203, 5204, 5406, 5601, 5602

10.4.2.4 Example

```

PIPELINE_ID, SUB_NETWORK_ID, GAS_DAY, PROFILE_HR01, PROFILE_HR02,
PROFILE_HR03, PROFILE_HR04, PROFILE_HR05, PROFILE_HR06, PROFILE_H
R07, PROFILE_HR08, PROFILE_HR09, PROFILE_HR10, PROFILE_HR11, PROFI
LE_HR12, PROFILE_HR13, PROFILE_HR14, PROFILE_HR15, PROFILE_HR16, P
ROFILE_HR17, PROFILE_HR18, PROFILE_HR19, PROFILE_HR20, PROFILE_HR
21, PROFILE_HR22, PROFILE_HR23, PROFILE_HR24
P, 1101, 2003-10-
01, 1, 1, 5, 5, 5, 6, 7, 7, 7, 12, 12, 8, 5, 6, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
P, 1102, 2003-10-
01, 1, 1, 5, 5, 5, 7, 7, 8, 7, 10, 10, 8, 5, 8, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
P, 1103, 2003-10-
01, 1, 1, 5, 5, 5, 7, 7, 8, 7, 10, 10, 8, 5, 8, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
  
```

10.4.3 Pipeline Ratio (PIPRATIO)

10.4.3.1 Data flow Definition

The data estimation entity to notify the pipeline operator of the ratio that it will use for a pipeline for a sub-network for a gas day.

10.4.3.2 Physical Mapping

The data for this flow must be provided in a automated electronic file.

Physical Name	Optionality
PIPELINE_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
PIPELINE_RATIO	1

10.4.3.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.4.3.4 Example

```

PIPELINE_ID, SUB_NETWORK_ID, GAS_DAY, PIPELINE_RATIO
P, 1101, 2003-10-30, 0.15
D, 1102, 2003-10-30, 0.22
  
```

10.5 Before the gas day - Western Australia

10.5.1 User Pipeline Nomination (UPNA)

10.5.1.1 Data flow Definition

User to notify the data estimation entity of user's pipeline nomination before the start of the gas day which in aggregate will meet the user's expected requirements of gas for the gas day.

10.5.1.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
PIPELINE_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
NOMINATION_AMOUNT	1

10.5.1.3 Event Codes

Event Code Number
5200, 5203, 5204, 5213, 5403, 5601

10.5.1.4 Example

```
USER_GBO_ID, PIPELINE_ID, SUB_NETWORK_ID, GAS_DAY, NOMINATION_AMOUNT  
USR1, P, 1101, 2003-10-01, 2300  
USR1, P, 1101, 2003-10-01, 1500  
USR1, P, 1102, 2003-10-01, 2200  
USR1, D, 1102, 2003-10-01, 900
```

10.5.2 Sub-network Profiled Nomination (NPN)

10.5.2.1 Data flow Definition

The data estimation entity to provide the profiled nomination for a sub-network for a gas day which is the nominated amount of gas that is used by the sub-network for the gas day.

10.5.2.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILED_NOMINATION_HR01	1
PROFILED_NOMINATION_HR02	1
PROFILED_NOMINATION_HR03	1
PROFILED_NOMINATION_HR04	1
PROFILED_NOMINATION_HR05	1
PROFILED_NOMINATION_HR06	1
PROFILED_NOMINATION_HR07	1
PROFILED_NOMINATION_HR08	1
PROFILED_NOMINATION_HR09	1
PROFILED_NOMINATION_HR10	1
PROFILED_NOMINATION_HR11	1
PROFILED_NOMINATION_HR12	1
PROFILED_NOMINATION_HR13	1
PROFILED_NOMINATION_HR14	1
PROFILED_NOMINATION_HR15	1
PROFILED_NOMINATION_HR16	1
PROFILED_NOMINATION_HR17	1
PROFILED_NOMINATION_HR18	1
PROFILED_NOMINATION_HR19	1
PROFILED_NOMINATION_HR20	1
PROFILED_NOMINATION_HR21	1
PROFILED_NOMINATION_HR22	1
PROFILED_NOMINATION_HR23	1
PROFILED_NOMINATION_HR24	1

10.5.2.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.5.2.4 Example

```
SUB_NETWORK_ID,GAS_DAY,PROFILED_NOMINATION_HR01,PROFILED_NOMINATION_HR02,PROFILED_NOMINATION_HR03,PROFILED_NOMINATION_HR04,PROFILED_NOMINATION_HR05,PROFILED_NOMINATION_HR06,PROFILED_NOMINATION_HR07,PROFILED_NOMINATION_HR08,PROFILED_NOMINATION_HR09,PROFILED_NOMINATION_HR10,PROFILED_NOMINATION_HR11,PROFILED_NOMINATION_HR12,PROFILED_NOMINATION_HR13,PROFILED_NOMINATION_HR14,PROFILED_NOMINATION_HR15,PROFILED_NOMINATION_HR16,PROFILED_NOMINATION_HR17,PROFILED_NOMINATION_HR18,PROFILED_NOMINATION_HR19,PROFILED_NOMINATION_HR20,PROFILED_NOMINATION_HR21,PROFILED_NOMINATION_HR22,PROFILED_NOMINATION_HR23,PROFILED_NOMINATION_HR24  
1101,2003-10-01,150,150,200,250,250,300,550,550,700,750,1250,1300,1150,1150,1200,1250,750,300,150,150,200,250,250,300  
1102,2003-10-01,150,150,200,250,250,300,550,750,900,1750,2250,2300,1550,1650,1200,1250,750,300,150,150,200,250,150,100  
1103,2003-10-01,150,150,200,250,250,400,550,550,900,950,1250,1300,1150,1150,1200,1250,750,500,500,450,300,250,350,200
```

10.5.3 Pipeline Profiled Nomination (PPN)

10.5.3.1 Data flow Definition

The data estimation entity to provide the profiled nomination for a pipeline for a gas day which is the nominated amount of gas that is used by the pipeline for the gas day.

10.5.3.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
PIPELINE_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILED_NOMINATION_HR01	1
PROFILED_NOMINATION_HR02	1
PROFILED_NOMINATION_HR03	1
PROFILED_NOMINATION_HR04	1
PROFILED_NOMINATION_HR05	1
PROFILED_NOMINATION_HR06	1
PROFILED_NOMINATION_HR07	1
PROFILED_NOMINATION_HR08	1
PROFILED_NOMINATION_HR09	1
PROFILED_NOMINATION_HR10	1
PROFILED_NOMINATION_HR11	1
PROFILED_NOMINATION_HR12	1
PROFILED_NOMINATION_HR13	1
PROFILED_NOMINATION_HR14	1
PROFILED_NOMINATION_HR15	1
PROFILED_NOMINATION_HR16	1
PROFILED_NOMINATION_HR17	1
PROFILED_NOMINATION_HR18	1
PROFILED_NOMINATION_HR19	1
PROFILED_NOMINATION_HR20	1
PROFILED_NOMINATION_HR21	1
PROFILED_NOMINATION_HR22	1
PROFILED_NOMINATION_HR23	1
PROFILED_NOMINATION_HR24	1

10.5.3.3 Example

PIPELINE_ID, SUB_NETWORK_ID, GAS_DAY, PROFILED_NOMINATION_HR01, PROFILED_NOMINATION_HR02, PROFILED_NOMINATION_HR03, PROFILED_NOMINATION_HR04, P

ROFILED_NOMINATION_HR05, PROFILED_NOMINATION_HR06, PROFILED_NOMINATION_HR07, PROFILED_NOMINATION_HR08, PROFILED_NOMINATION_HR09, PROFILED_NOMINATION_HR10, PROFILED_NOMINATION_HR11, PROFILED_NOMINATION_HR12, PROFILED_NOMINATION_HR13, PROFILED_NOMINATION_HR14, PROFILED_NOMINATION_HR15, PROFILED_NOMINATION_HR16, PROFILED_NOMINATION_HR17, PROFILED_NOMINATION_HR18, PROFILED_NOMINATION_HR19, PROFILED_NOMINATION_HR20, PROFILED_NOMINATION_HR21, PROFILED_NOMINATION_HR22, PROFILED_NOMINATION_HR23, PROFILED_NOMINATION_HR24
P, 1101, 2003-10-01, 75, 75, 100, 250, 125, 150, 275, 275, 350, 375, 625, 650, 575, 575, 600, 625, 375, 150, 75, 75, 100, 125, 125, 150
P, 1102, 2003-10-01, 75, 75, 100, 250, 125, 150, 275, 275, 350, 375, 625, 650, 575, 575, 600, 625, 375, 150, 75, 75, 100, 125, 125, 150

10.6 Before the gas day – South Australia

10.6.1 Forecasted unaccounted for gas (FUAFG)

10.6.1.1 Data flow Definition

The network operator is to provide it's forecast of the amount of unaccounted for gas for each supplier of UAFG in the sub-network for the gas day to the data estimation entity.

10.6.1.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
USER_GBO_ID	1
UUAFG	1

10.6.1.3 Event Codes

Event Code Number
5200, 5204, 5213, 5403, 5601

10.6.1.4 Example

```
SUB_NETWORK_ID,GAS_DAY,USER_GBO_ID,UUAFG  
1101,2003-10-01,USR1,205  
1101,2003-10-01,USR2,130  
1101,2003-10-01,USR3,200  
1102,2003-10-01,USR1,133  
1102,2003-10-01,USR2,133  
1102,2003-10-01,USR3,180  
1102,2003-10-01,USR4,190
```


10.6.2 Anticipated User Interval Withdrawal (AUIW)

10.6.2.1 Data flow Definition

User's must notify the data estimation entity of their anticipated interval-metered withdrawals for the gas day.

10.6.2.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
GAS_DAY	1
SUB_NETWORK_ID	1
AUIW	1

10.6.2.3 Event Codes

Event Code Number
5200, 5204, 5213, 5403, 5601

10.6.2.4 Example

```
USER_GBO_ID,GAS_DAY,SUB_NETWORK_ID,AUIW
USR1,2003-10-01,1101,2005
USR1,2003-10-01,1102,5320
USR1,2003-10-01,1103,3900
```

10.6.3 Interval-meter Demand Profile (IMDPROF)

10.6.3.1 Data flow Definition

The user to notify the data estimation entity of the interval-meter demand profile which when applied to the interval meter forecasts for the sub-network, user, shipper and pipeline gives the profiled forecast.

10.6.3.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILE_HR01	1
PROFILE_HR02	1
PROFILE_HR03	1
PROFILE_HR04	1

Physical Name	Optionality
PROFILE_HR05	1
PROFILE_HR06	1
PROFILE_HR07	1
PROFILE_HR08	1
PROFILE_HR09	1
PROFILE_HR10	1
PROFILE_HR11	1
PROFILE_HR12	1
PROFILE_HR13	1
PROFILE_HR14	1
PROFILE_HR15	1
PROFILE_HR16	1
PROFILE_HR17	1
PROFILE_HR18	1
PROFILE_HR19	1
PROFILE_HR20	1
PROFILE_HR21	1
PROFILE_HR22	1
PROFILE_HR23	1
PROFILE_HR24	1

10.6.3.3 Event Codes

Event Code Number
5200, 5204, 5213, 5406, 5601, 5602

10.6.3.4 Example

```

USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, PROFILE_HR01, PROFILE_HR02,
PROFILE_HR03, PROFILE_HR04, PROFILE_HR05, PROFILE_HR06, PROFILE_H
R07, PROFILE_HR08, PROFILE_HR09, PROFILE_HR10, PROFILE_HR11, PROFI
LE_HR12, PROFILE_HR13, PROFILE_HR14, PROFILE_HR15, PROFILE_HR16, P
ROFILE_HR17, PROFILE_HR18, PROFILE_HR19, PROFILE_HR20, PROFILE_HR
21, PROFILE_HR22, PROFILE_HR23, PROFILE_HR24
USR1, 1101, 2003-10-
01, 1, 1, 5, 5, 5, 6, 7, 7, 7, 12, 12, 8, 5, 6, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
USR1, 1102, 2003-10-
01, 1, 1, 5, 5, 5, 7, 7, 8, 7, 10, 10, 8, 5, 8, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
USR1, 1103, 2003-10-
01, 1, 1, 5, 5, 5, 7, 7, 8, 7, 10, 10, 8, 5, 8, 5, 2, 2, 1, 1, 1, 1, 0, 0, 0
  
```

10.6.4 Sub-network Profiled Forecast (NPF)

10.6.4.1 Data flow Definition

The data estimation entity to provide the profiled forecast for the sub-network which is the forecasted amount of gas used by the sub-network for the gas day.

10.6.4.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1
PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.4.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.6.4.4 Example

```
SUB_NETWORK_ID,GAS_DAY,PROFILE_FORECAST_HR01,PROFILE_FORECAST_HR02,PRO  
FILE_FORECAST_HR03,PROFILE_FORECAST_HR04,PROFILE_FORECAST_HR05,PRO  
FILE_FORECAST_HR06,PROFILE_FORECAST_HR07,PROFILE_FORECAST_HR08,PROFI  
LE_FORECAST_HR09,PROFILE_FORECAST_HR10,PROFILE_FORECAST_HR11,PROFILE  
_FORECAST_HR12,PROFILE_FORECAST_HR13,PROFILE_FORECAST_HR14,PROFILE_F  
ORECAST_HR15,PROFILE_FORECAST_HR16,PROFILE_FORECAST_HR17,PROFILE_FOR  
ECAST_HR18,PROFILE_FORECAST_HR19,PROFILE_FORECAST_HR20,PROFILE_FOREC  
AST_HR21,PROFILE_FORECAST_HR22,PROFILE_FORECAST_HR23,PROFILE_FORECAS  
T_HR24  
1101,2003-10-  
01,150,150,200,250,250,300,550,550,700,750,1250,1300,1150,1150,1200,  
1250,750,300,150,150,200,250,250,300  
1102,2003-10-  
01,150,150,200,250,250,300,550,750,900,1750,2250,2300,1550,1650,1200  
,1250,750,300,150,150,200,250,150,100  
1103,2003-10-  
01,150,150,200,250,250,400,550,550,900,950,1250,1300,1150,1150,1200,  
1250,750,500,500,450,300,250,350,200
```

10.6.5 User Profile Forecast (UPF)

10.6.5.1 Data flow Definition

The data estimation entity to provide to the user the user's profile forecast and the components used to calculate the user's profile forecast which are the user's basic-meter profile forecast, the user's interval-meter profile forecast, the user's reconciliation profile forecast, the user's swing profile forecast, and the user's unaccounted for gas profile forecast.

10.6.5.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
USER_PROFILE_TYPE	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1
PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.5.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.6.5.4 Example

```
USER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,USER_PROFILE_TYPE,PROFILE_FORECAST  
T_HR01,PROFILE_FORECAST_HR02,PROFILE_FORECAST_HR03,PROFILE_FORECAST_  
HR04,PROFILE_FORECAST_HR05,PROFILE_FORECAST_HR06,PROFILE_FORECAST_HR  
07,PROFILE_FORECAST_HR08,PROFILE_FORECAST_HR09,PROFILE_FORECAST_HR10  
,PROFILE_FORECAST_HR11,PROFILE_FORECAST_HR12,PROFILE_FORECAST_HR13,P  
ROFILE_FORECAST_HR14,PROFILE_FORECAST_HR15,PROFILE_FORECAST_HR16,PRO  
FILE_FORECAST_HR17,PROFILE_FORECAST_HR18,PROFILE_FORECAST_HR19,PROFI  
LE_FORECAST_HR20,PROFILE_FORECAST_HR21,PROFILE_FORECAST_HR22,PROFILE  
_FORECAST_HR23,PROFILE_FORECAST_HR24  
USR1,1101,2003-10-  
01,UPF,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,  
1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000,1000  
USR1,1101,2003-10-  
01,UBPF,500,500,500,500,500,500,500,500,500,500,500,500,500,500,500,  
500,500,500,500,500,500,500,500,500  
USR1,1101,2003-10-  
01,UPF,300,300,300,300,300,300,300,300,300,300,300,300,300,300,300,  
300,300,300,300,300,300,300,300,300,300,300,300,300  
USR1,1101,2003-10-  
01,SPF,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,  
50,50,50,50  
USR1,1101,2003-10-  
01,RPF,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,100,  
100,100,100,100,100,100,100,100  
USR1,1101,2003-10-  
01,UUAFGPF,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,  
50,50,50,50,50
```

10.6.6 Participant Profile Forecast (PPF)

10.6.6.1 Data flow Definition

The data estimation entity to provide the profile forecast for the user, shipper and pipeline to the relevant participant which is the participant's expected amount of gas for the gas day.

10.6.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
PARTICIPANT_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
GAS_DAY	1
PROFILE_FORECAST_HR01	1
PROFILE_FORECAST_HR02	1
PROFILE_FORECAST_HR03	1
PROFILE_FORECAST_HR04	1
PROFILE_FORECAST_HR05	1
PROFILE_FORECAST_HR06	1
PROFILE_FORECAST_HR07	1
PROFILE_FORECAST_HR08	1
PROFILE_FORECAST_HR09	1
PROFILE_FORECAST_HR10	1
PROFILE_FORECAST_HR11	1
PROFILE_FORECAST_HR12	1
PROFILE_FORECAST_HR13	1
PROFILE_FORECAST_HR14	1
PROFILE_FORECAST_HR15	1
PROFILE_FORECAST_HR16	1
PROFILE_FORECAST_HR17	1
PROFILE_FORECAST_HR18	1
PROFILE_FORECAST_HR19	1
PROFILE_FORECAST_HR20	1
PROFILE_FORECAST_HR21	1
PROFILE_FORECAST_HR22	1
PROFILE_FORECAST_HR23	1
PROFILE_FORECAST_HR24	1

10.6.7.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.6.7.4 Example

```
SUB_NETWORK_ID,GAS_DAY, HDD_VALUE  
2101,2003-12-02,15  
2102,2003-12-02,27  
2103,2003-12-02,33  
2104,2003-12-02,38
```

10.7 During the gas day

10.7.1 Gate Point Energy and Profile (GPENGPROF) (WA Only)

Note: No longer generated in SA from 29-June-2018

10.7.1.1 Data flow Definition

The *data estimation entity* to provide gate point energy and sub-network profile to the *user* for each *sub-network* in which they operate.

10.7.1.2 Physical Mapping

The data for this flow must be provided in an *automated electronic file*.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
ENERGY_INFLOW_HR01	1
ENERGY_INFLOW_HR02	0-1
ENERGY_INFLOW_HR03	0-1
ENERGY_INFLOW_HR04	0-1
ENERGY_INFLOW_HR05	0-1
ENERGY_INFLOW_HR06	0-1
ENERGY_INFLOW_HR07	0-1
ENERGY_INFLOW_HR08	0-1
ENERGY_INFLOW_HR09	0-1
ENERGY_INFLOW_HR10	0-1
ENERGY_INFLOW_HR11	0-1
ENERGY_INFLOW_HR12	0-1
ENERGY_INFLOW_HR13	0-1
ENERGY_INFLOW_HR14	0-1
ENERGY_INFLOW_HR15	0-1
ENERGY_INFLOW_HR16	0-1
ENERGY_INFLOW_HR17	0-1
ENERGY_INFLOW_HR18	0-1
ENERGY_INFLOW_HR19	0-1
ENERGY_INFLOW_HR20	0-1
ENERGY_INFLOW_HR21	0-1
ENERGY_INFLOW_HR22	0-1
ENERGY_INFLOW_HR23	0-1
ENERGY_INFLOW_HR24	0-1
PROFILED_NOMINATION_HR01	1
PROFILED_NOMINATION_HR02	1

Physical Name	Optionality
PROFILED_NOMINATION_HR03	1
PROFILED_NOMINATION_HR04	1
PROFILED_NOMINATION_HR05	1
PROFILED_NOMINATION_HR06	1
PROFILED_NOMINATION_HR07	1
PROFILED_NOMINATION_HR08	1
PROFILED_NOMINATION_HR09	1
PROFILED_NOMINATION_HR10	1
PROFILED_NOMINATION_HR11	1
PROFILED_NOMINATION_HR12	1
PROFILED_NOMINATION_HR13	1
PROFILED_NOMINATION_HR14	1
PROFILED_NOMINATION_HR15	1
PROFILED_NOMINATION_HR16	1
PROFILED_NOMINATION_HR17	1
PROFILED_NOMINATION_HR18	1
PROFILED_NOMINATION_HR19	1
PROFILED_NOMINATION_HR20	1
PROFILED_NOMINATION_HR21	1
PROFILED_NOMINATION_HR22	1
PROFILED_NOMINATION_HR23	1
PROFILED_NOMINATION_HR24	1

10.7.1.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.7.1.4 Example

SUB_NETWORK_ID,GAS_DAY,ENERGY_INFLOW_HR01,ENERGY_INFLOW_HR02,ENERGY_INFLOW_HR03,ENERGY_INFLOW_HR04,ENERGY_INFLOW_HR05,ENERGY_INFLOW_HR06,ENERGY_INFLOW_HR07,ENERGY_INFLOW_HR08,ENERGY_INFLOW_HR09,ENERGY_INFLOW_HR10,ENERGY_INFLOW_HR11,ENERGY_INFLOW_HR12,ENERGY_INFLOW_HR13,ENERGY_INFLOW_HR14,ENERGY_INFLOW_HR15,ENERGY_INFLOW_HR16,ENERGY_INFLOW_HR17,ENERGY_INFLOW_HR18,ENERGY_INFLOW_HR19,ENERGY_INFLOW_HR20,ENERGY_INFLOW_HR21,ENERGY_INFLOW_HR22,ENERGY_INFLOW_HR23,ENERGY_INFLOW_HR24,PROFILED_NOMINATION_HR01,PROFILED_NOMINATION_HR02,PROFILED_NOMINATION_HR03,PROFILED_NOMINATION_HR04,PROFILED_NOMINATION_HR05,PROFILED_NOMINATION_HR06,PROFILED_NOMINATION_HR07,PROFILED_NOMINATION_HR08,PROFILED_NOMINATION_HR09,PROFILED_NOMINATION_HR10,PROFILED_NOMINATION_HR11,PROFILED_NOMINATION_HR12,PROFILED_NOMINATION_HR13,PROFILED_NOMINATION_HR14,PROFILED_NOMINATION_HR15,PROFILED_NOMINATION_HR16,PROFILED_NOMINATION_HR17,PROFILED_NOMINATION_HR18,PROFILED_NOMINATION_HR19,PROFILED_NOMINATION_HR20,PROFILED_NOMINATION_HR21,PROFILED_NOMINATION_HR22,PROFILED_NOMINATION_HR23,PROFILED_NOMINATION_HR24

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SUBNET1,2003-10-
01,100,100,150,500,500,750,1000,1000,1000,1000,1000,1000,1000,
1000,1000,1000,1000,1000,1000,1000,1000,,,,,
100,200,200,200,500,500,500,500,1500,1500,1500,1500,
1500,1500,1500,1500,500,500,500,500,300,300,200,200
SUBNET2,2003-10-01,
100,100,150,500,500,750,1000,1000,1000,1000,1000,1000,
1000,1000,1000,1000,1000,1000,1000,1000,,,,,
100,200,200,200,500,500,500,500,1500,1500,1500,1500,
1500,1500,1500,1500,500,500,500,500,300,300,200,200

10.8 During the gas day – South Australia Only

10.8.1 No SA reports during the gas day

10.9 Reconciliation

10.9.1 User's Unaccounted For Gas (UUAFG)

10.9.1.1 Data flow Definition

10.9.1.2 The network operator to notify the data estimation entity of the estimated UAFG for user's.Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
PARTICIPANT_GBO_ID	1
UUAFG	1

10.9.1.3 Event Codes

Event Code Number
5200, 5204, 5213, 5403, 5601

10.9.1.4 Example

```
SUB_NETWORK_ID,GAS_DAY,PARTICIPANT_GBO_ID,UUAFG  
1101,2003-10-30,USR1,150  
1101,2003-10-30,USR2,300  
1101,2003-10-30,USR3,100  
1101,2003-10-30,USR4,220
```

10.9.2 User's Revised Unaccounted For Gas (RUAFG)

10.9.2.1 Data flow Definition

The data estimation entity to notify the relevant network operator of the revised UAFG for user's.

10.9.2.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
PARTICIPANT_GBO_ID	1
UUAFG	1

10.9.2.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.2.4 Example

```
SUB_NETWORK_ID,GAS_DAY,PARTICIPANT_GBO_ID,UUAFG  
1101,2003-10-30,USR5,125  
1101,2003-10-30,USR6,100  
1102,2003-10-30,USR2,125
```

10.9.3 Actual Unaccounted For Gas (AUAFG)

10.9.3.1 Data flow Definition

The data estimation entity is to notify the network operator and each user who is a supplier of UAFG for the sub-network of the calculated actual UAFG in the sub-network for each gas day in the historical period.

10.9.3.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
HISTORICAL_DAY	1
AUAFG	1

10.9.3.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.3.4 Example¹

```
SUB_NETWORK_ID,GAS_DAY,HISTORICAL_DAY,AUAFG
1101,2004-01-01,2004-01-01,750
1101,2004-01-01,2003-12-31,980
1101,2004-01-01,2003-12-30,1020
1101,2004-08-14,2003-12-29,725
...
1102,2004-08-14,2004-01-01,950
1102,2004-08-14,2003-12-31,920
```

¹ It should be noted that, following approval of the ICD changes associated with C18/05S (CCN63) an inconsistency was identified in the example above which could be misleading. The AUAFG flow is generated each gas day and represents historical data for the 425 days prior to the current gas day. As such, the example should show a consistent value in the GAS_DAY field for each sub network. The example will be replaced in the next iteration of the ICD by the following:

```
SUB_NETWORK_ID,GAS_DAY,HISTORICAL_DAY,AUAFG
1101,2006-01-01,2006-01-01,750
1101,2006-01-01,2005-12-31,980
1101,2006-01-01,2005-12-30,1020
1101,2006-01-01,2005-12-29,725
...
1101,2006-01-01,2004-11-03,725
1102,2006-01-01,2006-01-01,950
1102,2006-01-01,2005-12-31,920
1102,2006-01-01,2005-12-30,825
1102,2006-01-01,2005-12-29,870
1102,2006-01-01,2005-12-28,1350
```


1102, 2004-11-21, 2003-12-30, 825
 1102, 2004-11-21, 2003-12-29, 870
 1102, 2004-11-21, 2003-12-28, 1350

10.9.4 User's Total Estimated Withdrawal (UETW) (SA ONLY)

10.9.4.1 Data flow Definition

With the introduction of the STTM, the fields URAA and SSRA will always contain 0. In addition, the field for User Estimated Basic Withdrawals (UEBW) will be replaced by User Distributed Basic Withdrawals (UDBW) and User's Unaccounted For Gas (UUAFG) has been replaced by User's Actual Unaccounted For Gas (UAUAFG) (see clause 8.6.13 of the SA Retail Market Procedures for further details).

The data estimation entity to notify participants about user's estimated total withdrawal.

This flows is used to notify participants about the estimated energy values for the gas day shortly after the end of the gas day. The information is provided on sub-network level and provides the base for the initial settlement of the gas day.

10.9.4.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
UETW	1
UIW	1
UDBW	1
UAUAFG	1
URAA	1
SSAR	1

10.9.4.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.4.4 Example

```

USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, UETW, UIW, UDBW, UUAFG, URAA, SSAR
USR1, 1101, 2003-10-30, 2200, 700, 1300, 100, 0, 0
USR1, 1102, 2003-10-30, 2500, 800, 1500, 150, 0, 0
  
```

10.9.5 User's Total Estimated Withdrawal (UETW) (WA ONLY)

10.9.5.1 Data flow Definition

The data estimation entity to notify participants about user's estimated total withdrawal.

This flows is used to notify participants about the estimated energy values for the gas day shortly after the end of the gas day. The information is provided on sub-network level and provides the base for the initial settlement of the gas day.

The flow includes the SSAR value which in the BS is described as the sum of SRQ being repaid by the user on the gas day. The SRQ values for the user and each swing service provider were initially provided after the end of the gas day when the swing service was created. Because this UETW message is providing the data on the sub-network level there is no need for provision of each SRQ values.

The SSAR should be under normal circumstances zero. This is because the Procedures are designed that the swing service amounts for the user should be always in equal and opposite amount on the two pipelines for the sub-network.

10.9.5.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
UETW	1
UIW	1
UEBW	1
UUAFG	1
URAA	1
SSAR	1

10.9.5.3 Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.9.5.4 Example

```
USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, UETW, UIW, UEBW, UUAFG, URAA, SSAR
USR1, 1101, 2003-10-30, 2200, 700, 1300, 100, 75, 75
USR1, 1102, 2003-10-30, 2500, 800, 1500, 150, 75, 75
```

10.9.6 User's Total Reconciliation Amount (TRA)

10.9.6.1 Data flow Definition

With the introduction of the STTM in the SA Market the fields TRA, TBRA, TIRA, TBWRA, UUAFGRA, TMRA, URAA, UUAFGRAA will always contain 0.

The data estimation entity to notify the user and network operator about user's reconciliation information.

10.9.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
TRA	1
TBRA	1
TIRA	1
TBWRA	1
UUAFGRA	1
TMRA	1
URAA	1
UUAFGRAA	1

10.9.6.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.6.4 Example

```
USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, TRA, TBRA, TIRA, TBWRA, UUAFGRA, TMRA,  
URAA  
USR1, 1101, 2003-10-30, 250, 210, 25, 43, 10, 5, 236, 23  
USR1, 1101, 2003-10-30, 180, 150, 25, 23, 5, 0, 191, 0
```

10.9.7 Normalisation factor and net system load (NORM-NSL)

10.9.7.1 Data flow Definition

The data estimation entity is to notify users and network operators of the calculated normalisation factor and NSL for each sub-network for the previous 425 days, that is for the historical period for calculations.

Two additional fields provide participants with more visibility of mass market profiles

10.9.7.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1
HISTORICAL_DAY	1
NORMALISATION_FACTOR	1
NSL	1
TOTAL_EW_CUSTOMERS	1
USER_EW_CUSTOMERS	1

10.9.7.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.7.4 Example

```

SUB_NETWORK_ID,GAS_DAY,HISTORICAL_DAY,NORMALISATION_FACTOR,NSL,
TOTAL_CUSTOMERS, USER_CUSTOMERS
1101,2004-12-01,2004-01-01,0.92,23460, 4000, 1000
1101,2004-12-01,2004-01-02,0.93,22600, 4000, 1000
1101,2004-12-01,2004-01-03,0.92,23500, 4000, 1000
1101,2004-12-01,2004-01-04,0.94,24090, 4000, 1000
1101,2004-12-01,2004-01-05,0.95,23700, 4000, 1000
1101,2004-12-01,2004-01-06,0.95,23870, 4000, 1000
1101,2004-12-01,2004-01-07,0.94,23800, 4000, 1000
1101,2004-12-01,2004-01-08,0.95,24100, 4000, 1000
1101,2004-12-01,2004-02-26,0.96,24760, 4000, 1000
1101,2004-12-01,2004-02-27,0.94,24690, 4000, 1000
1101,2004-12-01,2004-02-28,0.96,24780, 4000, 1000
1101,2004-12-01,2004-03-01,0.97,24890, 4000, 1000

```

10.9.8 User Historical Gas Day Reconciliation Amount (UHRA)

10.9.8.1 Data flow Definition

With the introduction of the STTM in the SA Market the fields DELTA_SBRA, DELTA_BWRA, UDURA will always contain 0.

The data estimation entity must notify the user of their basic-metered reconciliation amounts and unaccounted for gas reconciliation amount for the previous 425 days, that is for the historical period for calculations.

10.9.8.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
HISTORICAL_DAY	1
DELTA_SBRA	1
DELTA_BWRA	1
UDURA	1

10.9.8.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.8.4 Example

```

USER_GBO_ID, SUB_NETWORK_ID, GAS_DAY, HISTORICAL_DAY, DELTA_SBRA, DELTA_B
WRA, UDURA
USR1, 1101, 2004-12-01, 2004-01-01, 150, 110, 0
USR1, 1101, 2004-12-01, 2004-01-02, 170, 120, 0
USR1, 1101, 2004-12-01, 2004-01-03, 250, 210, 0
USR1, 1101, 2004-12-01, 2004-01-04, 250, 210, 0
USR1, 1101, 2004-12-01, 2004-01-05, 250, 210, 0
USR1, 1101, 2004-12-01, 2004-01-06, 250, 210, 0
USR1, 1101, 2004-12-01, 2004-01-07, 270, 220, 10
USR1, 1101, 2004-12-01, 2004-01-08, 300, 200, 10
...
USR1, 1101, 2004-12-01, 2004-02-26, 1700, 1600, 30
USR1, 1101, 2004-12-01, 2004-02-27, 2020, 1400, 45
USR1, 1101, 2004-12-01, 2004-02-28, 1800, 1500, 51
USR1, 1101, 2004-12-01, 2004-03-01, 2400, 2100, 50
  
```

10.9.9 Miscellaneous Reconciliation Amount (MRA-NOTF)

10.9.9.1 Data flow Definition

With the introduction of the STTM in the SA Market the field MRA will always contain 0.

The RMA is to notify the data estimation entity of any miscellaneous reconciliation amount it determines applies to a user or sub-network for a gas day.

10.9.9.2 Physical Mapping

The data for this flow must be provided in an *notice*.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
MRA	1

10.9.10 User's total deemed withdrawal (UDW)

10.9.10.1 Data flow Definition

The data estimation entity to notify user's of their deemed withdrawal.

10.9.10.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
GAS_DAY	1
USER_DEEMED_WITHDRAWAL	1

10.9.10.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.10.4 Example

```

USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,GAS_DAY,USER_DEEMED_WITHDRAWAL
USR1,1101,P,2003-10-30,450
USR1,1103,D,2003-10-30,212
USR1,1105,P,2003-10-30,400
USR1,1106,P,2003-10-30,1500
USR1,1106,D,2003-10-30,3217
USR1,1107,P,2003-10-30,152
USR1,1107,D,2003-10-30,8975
  
```


10.9.11 Deemed Injections (DI) (WA Only)

10.9.11.1 Data flow Definition

The data estimation entity to notify shippers and swing service providers of their deemed injections

10.9.11.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
PARTICIPANT_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
USER_GBO_ID	1
DEEMED_INJECTION	1

10.9.11.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.11.4 Example

PARTICIPANT_GBO_ID,SUB_NETWORK_ID,GAS_DAY,USER_GBO_ID,DEEMED_INJECTION
 SHP1,1101,2003-10-30,USER1,10440
 SSP1,1102,2003-10-30,USER2,14220

10.9.12 Deemed Injections (DI_HST) (SA Only)

10.9.12.1 Data flow Definition

The data estimation entity to notify shippers on non-STTM network sections of their deemed injections on a monthly basis.

10.9.12.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
PARTICIPANT_GBO_ID	1
SUB_NETWORK_ID	1
HISTORICAL_DAY	1

Physical Name	Optionality
USER_GBO_ID	1
DEEMED_INJECTION	1

10.9.12.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.12.4 Example

GAS_DAY, PARTICIPANT_GBO_ID, SUB_NETWORK_ID, HISTORICAL_DAY, USER_GBO_ID, DEEMED_INJECTION
2003-10-30, SHP1, 2104, 2003-10-30, USER1, 10440
2003-10-30, SHP1, 2104, 2003-10-29, USER1, 10220

10.9.13 User's hourly sub-network apportionment (UHSA)

10.9.13.1 Data flow Definition

The data estimation entity to notify user's of their hourly sub-network apportionment which is the user's hourly withdrawal from the sub-network less the swing service repayment quantity.

10.9.13.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
HOURLY_APPORTIONMENT_HR01	1
HOURLY_APPORTIONMENT_HR02	1
HOURLY_APPORTIONMENT_HR03	1
HOURLY_APPORTIONMENT_HR04	1
HOURLY_APPORTIONMENT_HR05	1
HOURLY_APPORTIONMENT_HR06	1
HOURLY_APPORTIONMENT_HR07	1
HOURLY_APPORTIONMENT_HR08	1
HOURLY_APPORTIONMENT_HR09	1
HOURLY_APPORTIONMENT_HR10	1
HOURLY_APPORTIONMENT_HR11	1
HOURLY_APPORTIONMENT_HR12	1

Physical Name	Optionality
HOURLY_APPORTIONMENT_HR13	1
HOURLY_APPORTIONMENT_HR14	1
HOURLY_APPORTIONMENT_HR15	1
HOURLY_APPORTIONMENT_HR16	1
HOURLY_APPORTIONMENT_HR17	1
HOURLY_APPORTIONMENT_HR18	1
HOURLY_APPORTIONMENT_HR19	1
HOURLY_APPORTIONMENT_HR20	1
HOURLY_APPORTIONMENT_HR21	1
HOURLY_APPORTIONMENT_HR22	1
HOURLY_APPORTIONMENT_HR23	1
HOURLY_APPORTIONMENT_HR24	1

10.9.13.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.13.4 Example

```

USER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,HOURLY_APPORTIONMENT_HR01,HOURLY_
APPORTIONMENT_HR02,HOURLY_APPORTIONMENT_HR03,HOURLY_APPORTIONMENT_HR
04,HOURLY_APPORTIONMENT_HR05,HOURLY_APPORTIONMENT_HR06,HOURLY_APPORT
IONMENT_HR07,HOURLY_APPORTIONMENT_HR08,HOURLY_APPORTIONMENT_HR09,HOU
RLY_APPORTIONMENT_HR10,HOURLY_APPORTIONMENT_HR11,HOURLY_APPORTIONMEN
T_HR12,HOURLY_APPORTIONMENT_HR13,HOURLY_APPORTIONMENT_HR14,HOURLY_AP
PORTIONMENT_HR15,HOURLY_APPORTIONMENT_HR16,HOURLY_APPORTIONMENT_HR17
,HOURLY_APPORTIONMENT_HR18,HOURLY_APPORTIONMENT_HR19,HOURLY_APPORTIO
NMENT_HR20,HOURLY_APPORTIONMENT_HR21,HOURLY_APPORTIONMENT_HR22,HOURL
Y_APPORTIONMENT_HR23,HOURLY_APPORTIONMENT_HR24
USR1,1101,2003-10-
01,75,75,75,75,75,75,75,150,150,150,300,300,350,400,350,300,300,150,150
,75,75,75,75,75,75
USR1,1102,2003-10-
01,75,75,75,75,75,75,75,150,150,150,300,300,350,400,350,300,300,150,150
,75,75,75,75,75,75

```

10.9.14 Shipper’s hourly gate point apportionment (SHGA)

10.9.14.1 Data flow Definition

The data estimation entity to notify shipper’s of their hourly gate point apportionment which is the shipper’s hourly deemed injection into the sub-network.

10.9.14.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SHIPPER_GBO_ID	1
SUB_NETWORK_ID	1
GAS_DAY	1
HOURLY_APPORTIONMENT_HR01	1
HOURLY_APPORTIONMENT_HR02	1
HOURLY_APPORTIONMENT_HR03	1
HOURLY_APPORTIONMENT_HR04	1
HOURLY_APPORTIONMENT_HR05	1
HOURLY_APPORTIONMENT_HR06	1
HOURLY_APPORTIONMENT_HR07	1
HOURLY_APPORTIONMENT_HR08	1
HOURLY_APPORTIONMENT_HR09	1
HOURLY_APPORTIONMENT_HR10	1
HOURLY_APPORTIONMENT_HR11	1
HOURLY_APPORTIONMENT_HR12	1
HOURLY_APPORTIONMENT_HR13	1
HOURLY_APPORTIONMENT_HR14	1
HOURLY_APPORTIONMENT_HR15	1
HOURLY_APPORTIONMENT_HR16	1
HOURLY_APPORTIONMENT_HR17	1
HOURLY_APPORTIONMENT_HR18	1
HOURLY_APPORTIONMENT_HR19	1
HOURLY_APPORTIONMENT_HR20	1
HOURLY_APPORTIONMENT_HR21	1
HOURLY_APPORTIONMENT_HR22	1
HOURLY_APPORTIONMENT_HR23	1
HOURLY_APPORTIONMENT_HR24	1

10.9.14.3 Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.9.14.4 Example

```
SHIPPER_GBO_ID,SUB_NETWORK_ID,GAS_DAY,HOURLY_APPORTIONMENT_HR01,HOURLY_APPORTIONMENT_HR02,HOURLY_APPORTIONMENT_HR03,HOURLY_APPORTIONMENT_HR04,HOURLY_APPORTIONMENT_HR05,HOURLY_APPORTIONMENT_HR06,HOURLY_APPORTIONMENT_HR07,HOURLY_APPORTIONMENT_HR08,HOURLY_APPORTIONMENT_HR09,HOURLY_APPORTIONMENT_HR10,HOURLY_APPORTIONMENT_HR11,HOURLY_APPORTIONMENT_HR12,HOURLY_APPORTIONMENT_HR13,HOURLY_APPORTIONMENT_HR14,HOURLY_APPORTIONMENT_HR15,HOURLY_APPORTIONMENT_HR16,HOURLY_APPORTIONMENT_HR17,HOURLY_APPORTIONMENT_HR18,HOURLY_APPORTIONMENT_HR19,HOURLY_APPORTIONMENT_HR20,HOURLY_APPORTIONMENT_HR21,HOURLY_APPORTIONMENT_HR22,HOURLY_APPORTIONMENT_HR23,HOURLY_APPORTIONMENT_HR24  
SSP1,1101,2003-10-01,75,75,75,75,75,75,150,150,150,300,300,350,400,350,300,300,150,150,75,75,75,75,75,175  
SSP1,1102,2003-10-01,75,75,75,75,75,150,150,1500,300,300,350,400,350,300,300,150,1500,750,750,750,750,750,750
```

10.9.15 Gate point reconciliation adjustment amount (GAA)

10.9.15.1 Data flow Definition

With the introduction of the STTM in the SA Market the field GAA will always contain 0.

The data estimation entity to notify the pipeline operator, network operator and user about gate point reconciliation information for the gas day.

10.9.15.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GATE_POINT_ID	1
GAS_DAY	1
TPI	1
GAA	1

10.9.15.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.15.4 Example

GATE_POINT_ID, GAS_DAY, TPI, GAA
 1101D, 2003-10-30, 250, 236
 1102D, 2003-10-30, 580, 291

10.9.16 Historical gate point data (PCI-HST)

10.9.16.1 Data flow Definition

With the introduction of the STTM in the SA Market the field GAA will always contain 0.

The data estimation entity to notify participants about the historical injections and adjustment amount for gate points.

10.9.16.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
GATE_POINT_ID	1

Physical Name	Optionality
HISTORICAL_DAY	1
PI	1
GAA	1
PCI	1

10.9.16.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.16.4 Example

```
GAS_DAY,GATE_POINT_ID,HISTORICAL_DAY,PI,GAA,PCI
2003-10-30,1101D,2003-10-30,250150,10,250160
2003-10-30,1101D,2003-10-29,250,0,250
2003-10-30,1101D,2003-10-28,23350,-10,23340
```

10.9.17 Historical user withdrawal data (UETW-HST) (SA ONLY)

With the introduction of the STTM, the fields URAA and SSRA will always contain 0. In addition, the field for User Estimated Basic Withdrawals (UEBW) will be replaced by User Distributed Basic Withdrawals (UDBW) and User's Unaccounted For Gas (UUAFG) has been replaced by User's Actual Unaccounted For Gas (UAUAFG). (see clause 8.6.13 of the SA Retail Market Procedures for further details). User's Basic Withdrawals (UBW) is replaced by User's Distributed Basic Withdrawals (UDBW) (see clause 8.6.11 of the SA Retail Market Procedures for further details).

10.9.17.1 Data flow Definition

The data estimation entity to notify participants about the historical user withdrawal data for sub-network.

10.9.17.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
HISTORICAL_DAY	1
UETW	1
UIW	1

Physical Name	Optionality
UEBW	1
UAUAFG	1
URAA	1
SSAR	1
UDBW	1

Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.9.17.3 Example

GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,HISTORICAL_DAY,UETW,UIW,UEBW,UAUAFG,URAA,SSAR,UDBW
2003-10-30,USR1,1101,2003-10-30,2100,700,1300,100,75,0,1050
2003-10-30,USR1,1101,2003-10-29,1900,700,1000,100,100,0,1000

10.9.18 Historical user withdrawal data (UETW-HST) (WA ONLY)

10.9.18.1 Data flow Definition

The data estimation entity to notify participants about the historical user withdrawal data for sub-network.

10.9.18.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
HISTORICAL_DAY	1
UETW	1
UIW	1
UEBW	1
UAUAFG	1
URAA	1
SSAR	1
UBW	1

10.9.18.3 Event Codes

Event Code Number

There are no event codes as the flow is outgoing flow.

10.9.18.4 Example

GAS_DAY, USER_GBO_ID, SUB_NETWORK_ID, HISTORICAL_DAY, UETW, UIW, UEBW, UUAFG, URAA, SSAR, UBW
 2003-10-30, USR1, 1101, 2003-10-30, 2100, 700, 1300, 100, 75, 0, 1050
 2003-10-30, USR1, 1101, 2003-10-29, 1900, 700, 1000, 100, 100, 0, 1000

10.10 Swing Service (WA only)

10.10.1 User off-market swing service procurement instruction (OMP-USR)

10.10.1.1 Data flow Definition

The user notifies the data estimation entity regarding off-market procurements no later than 30 min before start of gas day.

10.10.1.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SSP_ID	1
SWING_GAS_QUANTITY	1
SWING_TYPE	1
BID_PRIORITY	1
SSP_R_ID	1
ALLOCATION	1

10.10.1.3 Event Codes

Event Code Number
5200, 5202, 5203, 5204, 5205, 5206, 5207, 5213, 5215, 5216, 5220, 5403, 5601

10.10.1.4 Example

```
USER_GBO_ID,GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,SSP_ID,SWING_GAS_QUAN  
TITY,SWING_TYPE,BID_PRIORITY,SSP_R_ID,ALLOCATION  
USR1,2004-01-01,1106,P,SSP1,10,L,1,SSP2,10  
USR1,2004-01-01,1106,P,SSP1,10,L,1,SSP3,90  
USR1,2004-01-01,1106,D,SSP5,4,L,2,SSP6,100  
USR1,2004-01-01,1106,D,SSP6,133,L,3,SSP5,100  
USR1,2004-01-01,1107,P,SSP13,10,P,1,SSP1,100
```

10.10.1.5 GRMS validation procedure

The header of the csv file defines the columns.

Each line in the flow represents a user allocation request of repayment of an off-market trade.

All allocation requests in the message are grouped in two levels.

First by

- USER_GBO_ID
- SUB_NETWORK_ID
- PIPELINE_ID
- GAS_DAY
- SWING_TYPE
- PRIORITY
- SSP_ID
- SWING_GAS_QUANTITY

This group represents a user's off-market trade request as per the Procedures.

In second place the requests gets grouped by

- GAS_DAY
- USER_GBO_ID
- PIPELINE_ID
- SUB_NETWORK_ID
- SWING_TYPE

This group creates a user's off-market trade instruction as per the Procedures.

When the file gets processed all the data are validated as follows:

The user allocation instruction (the secondary group) is validated that:

- the GAS_DAY column is valid
- the USER_GBO_ID column is valid
- the USER_GBO_ID is the sender of the message

- the PIPELINE_ID is valid
- the SUB_NETWORK_ID is valid
- the SWING_TYPE is valid
- the timeline for providing the information is validated

Then each of the user allocation requests (the first group) is validated separately against the following additional criteria:

- the SSP_ID is valid
- the SWING_GAS_QUANTITY is valid
- the PRIORITY is valid (positive number)
- the swing service provider is validated against swing service provider register.
- Each of the allocation requests for the off-market trade request is valid (as per below)
- And that the total percentage of the allocation requests is equal to 100%

The allocation requests (lines in the flow) are validated against the following additional criteria:

- the SSP_R_ID is valid
- ALLOCATION value is valid
- the repaying swing service provider is validated against the swing service provider register

If the whole user off market instruction or any of the user off market requests or allocation requests don't comply with the above specified criteria the user off-market trade instruction (for the user, the gas day, the sub-network, the pipeline and the swing type) is rejected with appropriate event code.

If GRMS already holds a previously accepted off-market trade user instruction then this will be replaced with the new instruction if the new instruction is valid and accepted.

Refer to the BS for more details

10.10.1.6 Processes

The user off-market trade instruction is used in the following GRMS processes:

- The matching and validation of off-market trade instruction with the off-market trade confirmations
- Applying off-market traded during the swing gas calculation

Refer to the BS for mode details

10.10.1.6.1 Matching of off-market trades

Before the gas day the user off-market trade instruction supplied by users is evaluated against the off-market confirmation provided by swing service providers. The off-market requests are aggregated by the gas day, sub-network, pipeline, swing service type and swing service provider (supplying the trade). This amount is then compared with the amount supplied by the appropriate swing service provider for the user and the same combination of the gas day, sub-network, pipeline, swing type.

If the amount “confirmed” by the swing service provider is equal or larger then the total amount “requested” by the user from the swing service provider, then for each of the user’s requests for the swing service provider a matched swing service trade is generated.

If the amount “confirmed” by the swing service provider is less then the total amount “requested” by the user from the swing service provider, then none of the user’s requests will be matched (approved).

EXAMPLE:

A USR1 submits a OMP-USR CSV that contains a number of rows for SSP1 (ROW 1, ROW 2, ROW 3) one for SSP2 (ROW 4) and two rows for SSP3 (ROW 5, ROW 6).

SSP2 fails to submit a OMP-SSP for USR1, but SSP2 and SSP3 submits correct confirmations.

GRMS evaluates the user's USR1 instruction. The evaluation shows, that the SSP1 didn't confirm the quantity for the user USR1 therefore all trades submitted by the USR1 for the SSP1 will not be matched, the not matched rows are going to be ROW1, ROW2, ROW3.

The evaluation shows that the user USR1 requests for the SSP2 and SSP3 are confirmed therefore the rows ROW4, 5, 6 are going to be matched.

The result of this is that the users position for the day trading is the trades on rows 4,5,6.

The OMP-STATUS will contain only those requests that were matched (approved).

The OMP-USR will be rejected only immediately after submission and user will know about the reason why the OMP-USR was rejected because the user will receive an transaction acknowledgement with the event code = reason why it was rejected.

The only reason why a request previously submitted by a user doesn't appear in the OMP-STATUS (is not matched approved) is that the total quantity requested from the SSP was not confirmed by the SSP.

When a SSP submits a confirmation, but user doesn't, then the SSP is not going to receive any line in the OMP-STATUS report for the user.

10.10.1.6.2 Applying of off-market trades

After the end of the gas day, during the swing gas calculation, the matched user requests are applied against the user swing service quantity. The requests are applied in order from lowest number to highest number till all of the requests are fully exhausted or till there is no amount of the user swing service left.

It is suggested that the PRIORITY is a unique number across the user off-market trade instruction. If there is duplicate priority the GRMS doesn't guarantee the order in which the trade instruction will be applied during the matching process.

Where a user submits a OMP-USR CSV containing duplicate Priorities (for example: row 1 has a PRIORITY of 1 and so does row 2) then the GRMS has no mechanism to determine the order in which the off market trades should to be applied. In these circumstances the GRMS cannot guarantee that the off market trades will be applied in an order that the user may have expected. It is the responsibility of Market Participants (ie users) to supply an OMP-USR CSV file with correctly assigned priorities to ensure that their off market trades are applied in the right order.

10.10.1.6.3 Applying of off-market trades example

A USR1 submits a OMP-USR CSV that contains a number of rows for SSP1 (ROW 1, ROW 2, ROW 3) one for SSP2 (ROW 4) and two rows for SSP3 (ROW 5, ROW 6).

SSP2 fails to submit a OMP-SSP for USR1, but SSP2 and SSP3 submits correct confirmations.

GRMS evaluates the user's USR1 instruction. The evaluation shows, that the SSP1 didn't confirm the quantity for the user USR1 therefore all trades submitted by the USR1 for the SSP1 will not be matched, the not matched rows are going to be ROW1, ROW2, ROW3.

The evaluation shows that the user USR1 requests for the SSP2 and SSP3 are confirmed therefore the rows ROW4, 5, 6 are going to be matched.

The result of this is that the users position for the day trading is the trades on rows 4,5,6.

The OMP-STATUS will contain only those requests that were matched (approved).

The OMP-USR will be rejected only immediately after submission and user will know about the reason why the OMP-USR was rejected because the user will receive an transaction acknowledgement with the event code = reason why it was rejected.

The only reason why a request previously submitted by a user doesn't appear in the OMP-STATUS (is not matched approved) is that the total quantity requested from the SSP was not confirmed by the SSP.

When a SSP submits a confirmation, but user doesn't, then the SSP is not going to receive any line in the OMP-STATUS report for the user.

10.10.2 Swing Service Provider off-market service procurement (OMP-SSP) (WA only)

10.10.2.1 Data flow Definition

The Swing Gas Provider notifies the data estimation entity regarding off-market procurements no later than 30 min before start of gas day.

10.10.2.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SSP_ID	1
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SWING_GAS_QUANTITY	1
SWING_TYPE	1

10.10.2.3 Event Codes

Event Code Number
5200, 5202, 5203, 5204, 5205, 5206, 5213, 5215, 5216, 5403, 5601

Note: In all cases the severity of each event will be “Error”.

10.10.2.4 Example

```
SSP_ID,GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,SWING_GAS_QUAN
TITY,SWING_TYPE
SSP1,2004-01-01,USR1,1106,D,10,P
SSP1,2004-01-01,USR1,1106,D,54,P
SSP1,2004-01-01,USR2,1106,P,6,P
SSP1,2004-01-01,USR2,1106,P,5533,L
SSP1,2004-01-01,USR1,1107,D,443,L
SSP1,2004-01-01,USR2,1107,D,78,P
SSP1,2004-01-01,USR2,1107,P,24,L
SSP1,2004-01-01,USR2,1107,P,45,L
```

10.10.3 Swing Service Provider off-market service procurement surplus instruction (OMP-SURPLUS) (WA only)

10.10.3.1 Data flow Definition

10.10.3.2 The Swing Gas Provider notifies the data estimation entity regarding surplus instruction of off-market procurements no later than 30 min before start of gas day. Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SSP_ID	1
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SWING_TYPE	1
ALLOCATION_PRECEDENCE	1
ALLOCATION_TYPE	1
ALLOCATION	1
PRICE	1

10.10.3.3 Event Codes

Event Code Number
5200, 5202, 5203, 5204, 5205, 5206, 5207, 5208, 5215, 5216, 5217, 5607, 5221, 5224, 5403, 5601

Note: In all cases the severity of each event will be “Error”.

10.10.3.4 Example

```
SSP_ID,GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,SWING_TYPE,ALLOCATION_PRECEDENCE,ALLOCATION_TYPE,ALLOCATION,PRICE
SSP1,2004-01-01,1101,D,L,1,P,90,10.23
SSP1,2004-01-01,1101,D,L,2,P,10,44
SSP1,2004-01-01,1101,D,P,3,P,100,54.454
SSP1,2004-01-01,1102,D,L,1,P,100,5533.333
SSP1,2004-01-01,1102,D,P,2,P,60,78.22
SSP1,2004-01-01,1102,D,P,3,P,40,24.78
SSP1,2004-01-02,1102,D,L,1,P,20,6.22
SSP1,2004-01-02,1102,D,L,2,P,80,45.621
```

10.10.3.5 GRMS validation procedure

The header of the csv file defines the columns.

Each line in the flow represents a swing service provider surplus request.

All requests in the message are grouped by.

First by

- SSP_ID
- SUB_NETWORK_ID
- PIPELINE_ID
- GAS_DAY
- SWING_TYPE

This group represents a swing service provider's off-market surplus instruction as per the Procedures.

When the file gets processed all the data are validated as follows:

The swing service provider surplus instruction is validated that:

- the GAS_DAY column is valid
- the SSP_ID column is valid
- the SSP_ID is the sender of the message
- the PIPELINE_ID is valid
- the SUB_NETWORK_ID is valid
- the SWING_TYPE is valid
- the swing service provider is validated against swing service provider register.
- the timeline for providing the information is validated
- the requests are validated as described below
- the sum of the percentages is not more than 100%

Then each of the surplus requests (lines in the flow) is validated separately against the following additional criteria:

- ALLOCATION_PRECEDENCE is valid
- ALLOCATION TYPE is Percentage
- ALLOCATION is valid percentage
- The bid price is valid

If the swing service provider's surplus instruction or any the surplus requests doesn't comply with the above specified criteria the swing service provider surplus instruction (for the gas day, the sub-network, the pipeline and the swing type) is rejected with appropriate event code.

If GRMS already registers a last previously accepted the swing service provider's surplus instruction then this will be replaced with the new instruction if the new instruction is valid and accepted.

If the new instruction is not valid and rejected then the original registered instruction will remain current.

Refer to the BS for mode details

10.10.3.6 Processes

The swing service provider's surplus instruction is used in the following GRMS processes:

- Applying the swing service providers residual of the off-market trades to the swing service bid-stack.

Refer to the BS for mode details

10.10.3.6.1 Applying the surplus into the bid stack

After the end of the gas day, when all the off-market trading is derived and applied, the residual of the trades is derived for each of the swing service provider for the gas day, sub-network, pipeline and type of swing service. The residual is derived as the difference between the total amount of submitted confirmations by the swing service provider and the total amount of the applied trades on behalf of this swing service provider.

The residual is apportioned to a number of new bids using the percentage supplied by the swing service provider in the surplus instruction. For each new bid applied into the bid-stack the price nominated by the swing service provider in the surplus instruction is used.

It is suggested that the PRIORITY is a unique number across the swing service provider surplus instruction. If there is duplicate priority the GRMS doesn't guarantee the order in which the quantity instruction will be applied during the process. Currently the priority is not used as only percentage allocation types are accepted. It is foreseen in the future the market will require Quantity allocation and therefore the priority will be used to set the order in which the quantity instructions will be applied.

10.10.4 Off-market service procurement instruction Status (OMP-STATUS) (WA only)

10.10.4.1 Data flow Definition

The data estimation entity is to provide a status report of all matching user and swing service provider off-market procurement instructions..

10.10.4.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SSP_ID	1
SWING_GAS_QUANTITY	1
SWING_TYPE	1

10.10.4.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.4.4 Example

```
GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,SSP_ID,SWING_GAS_QUAN
TITY,SWING_TYPE
2004-01-01,USR1,1101,D,SSP1,10,P
2004-01-01,USR1,1102,D,SSP5,443,L
2004-01-01,USR1,1101,D,SSP8,54,P
2004-01-01,USR2,1101,D,SSP4,5533,L
2004-01-01,USR2,1101,G,SSP1,78,P
2004-01-01,USR2,1102,G,SSP3,24,L
2004-01-01,USR2,1101,D,SSP2,6,P
2004-01-01,USR2,1103,D,SSP1,45,L
```

10.10.5 Applied Off-market service procurement (OMP-APP) (WA only)

10.10.5.1 Data flow Definition

The data estimation entity is to provide a report of all applied off-market procurement instructions, **applied requests**.

The data for this flow will contain a row for each of the off-market trade and quantity of the request that has been applied. For example, if there are 2 or more deals with the same SSP for the same gas day then there should be a row for each for the 2 trades such as 5,000 GJ and 750 GJ instead of 5,750 GJ.

10.10.5.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SSP_ID	1
SWING_GAS_QUANTITY	1
SWING_TYPE	1

10.10.5.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.5.4 Example

```
GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,SSP_ID,SWING_GAS_QUAN
TITY,SWING_TYPE
2004-01-01,USR1,1101,D,SSP1,10,P
2004-01-01,USR1,1102,D,SSP5,443,L
2004-01-01,USR1,1101,D,SSP8,54,P
2004-01-01,USR2,1101,D,SSP4,5533,L
2004-01-01,USR2,1102,D,SSP1,78,P
2004-01-01,USR2,1102,D,SSP3,24,L
2004-01-01,USR2,1101,D,SSP2,6,P
2004-01-01,USR2,1103,D,SSP1,45,L
```

10.10.6 Swing Service Bids (BID-SSP) (WA only)

10.10.6.1 Data flow Definition

Swing Service Providers will supply swing service bids to the data estimation entity.

10.10.6.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SSP_ID	1
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
BID_PRICE	1
SWING_GAS_QUANTITY	1
SWING_TYPE	1

10.10.6.3 Event Codes

Event Code Number
5200, 5202, 5203, 5204, 5205, 5206, 5215, 5216, 5224, 5403, 5601

Note: In all cases the severity of each event will be “Error”.

10.10.6.4 Examples

```
SSP_ID,GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,BID_PRICE,SWING_GAS_QUANTI
TY,SWING_TYPE
SSP1,2004-01-01,1101,P,1.233,50,P
SSP1,2004-01-01,1101,P,55,443,L
SSP1,2004-01-01,1101,P,1,500,P
SSP1,2004-01-01,1101,P,566,334,L
SSP1,2004-01-01,1101,P,12,22,P
SSP1,2004-01-01,1101,P,43.24,7845,L
SSP1,2004-01-01,1102,P,542.22,6,P
SSP1,2004-01-01,1103,P,5235,45,L
```

10.10.7 Bid Stack Publication (BID-PUB) (WA only)

10.10.7.1 Data flow Definition

The data estimation entity will make available the bid stack for each pipeline for each sub-network on each gas day.

10.10.7.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SWING_TYPE	1
BID_PRICE	1
SWING_GAS_QUANTITY	1

10.10.7.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.7.4 Example

```
GAS_DAY, SUB_NETWORK_ID, PIPELINE_ID, SWING_TYPE, BID_PRICE, SWING_GAS_QUANTITY
2004-01-01, 1102, D, L, 443, 12
2004-01-01, 1101, D, P, 8.22, 31
2004-01-01, 1102, D, P, 10.233, 68
2004-01-01, 1101, D, L, 0.553, 112
2004-01-01, 1101, G, P, 0.23, 664
```

10.10.8 Marginal Clearing Price for the total Amount of Swing Service (MCP-TSS) (WA only)

10.10.8.1 Data flow Definition

The data estimation entity must inform the users and swing service providers of the marginal clearing price for the total amount of swing service to be procured from each bid stack.

10.10.8.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
MCP_TSS	1

10.10.8.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.8.4 Example

```
GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,MCP_TSS  
2004-01-01,1101,D,4.154  
2004-01-01,1101,G,234.2  
2004-01-01,1102,D,443  
2004-01-01,1102,G,0.8
```

10.10.9 Marginal Clearing Price for the total adjusted non-user-specific amounts of Swing Service (MCP-TANUSA) (WA only)

10.10.9.1 Data flow Definition

The data estimation entity must inform the users and swing service providers of the marginal clearing price for the total adjusted non-user-specific amounts of swing service to be procured from each bid stack.

10.10.9.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
MCP_TANUSA	1

10.10.9.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.9.4 Example

```
GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,MCP_TANUSA
2004-01-01,1102,D,56.555
2004-01-01,1101,D,31.1
2004-01-01,1101,G,12
```


10.10.10 Notification of Swing Service Allocation through the Bid Stack (BID-ALLOC) (WA only)

10.10.10.1 Data flow Definition

The data estimation entity is to notify the swing service providers and users of allocations made under the bid stack.

10.10.10.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
SSP_ID	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
FSS	1
SWING_TYPE	1
SWING_GAS_QUANTITY	1
GAS_DAY	1

10.10.10.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.10.4 Example

```
SSP_ID,USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,FSS,SWING_TYPE,SWING_G
AS_QUANTITY,GAS_DAY
SSP2,USR6,1106,P,12030,L,214,2004-01-01
SSP2,USR5,1106,P,1344,L,25,2004-01-01
SSP3,USR5,1106,G,280,P,17,2004-01-01
SSP2,USR1,1106,G,6500,P,100,2004-01-01
```

10.10.11 Swing service (SS) (WA only)

10.10.11.1 Data flow Definition

The data estimation entity to notify the participants of the swing service for a pipeline.

10.10.11.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
SS	1
PCI	1
UDW_TOTAL	1
ABS_UETW_TOTAL	1
TUSA	1
TUNUSA	1
TAUSA	1
TANUSA	1
TSS	1
MCP_TSS	1
MCP_TANUSA	1

10.10.11.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.11.4 Example

```
GAS_DAY,SUB_NETWORK_ID,PIPELINE_ID,SS,PCI,UDW_TOTAL,ABS_UETW_TOTAL,T
USA,TUNUSA,TAUSA,TANUSA,TSS,MCP_TSS,MCP_TANUSA
2004-01-01,1106,D,10,100,90,150,5,5,0,0,0,0,0
2004-01-01,1106,G,-10,50,60,150,-7,-3,-2,0,-2,0.5,0
```

10.10.12 User's swing service (USS) (WA only)

10.10.12.1 Data flow Definition

The data estimation entity to notify the user of their swing service information.

10.10.12.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
USS	1
PUSA	1
NUSA	1
USA	1
ANUSA	1
AUSA	1

10.10.12.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.12.4 Example

```
GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,PIPELINE_ID,USS,PUSA,NUSA,USA,ANU
SA,AUSA
2004-01-01,USR1,1106,D,50,0,13,3,63,24
2004-01-01,USR1,1106,P,-50,0,-15,-5,-35,-53
2004-01-01,USR1,1107,P,15,0,0,3,5,72
2004-01-01,USR1,1107,D,-15,0,-5,-10,-5,-2
```

10.10.12.5 Notes

10.10.13 Swing Service Repayment Quantity (SRQ) (WA only)

10.10.13.1 Data flow Definition

On a gas day the data estimation entity is to provide the Swing Service Repayment Quantity to the user.

10.10.13.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
USER_GBO_ID	1
SUB_NETWORK_ID	1
SWING_GAS_QUANTITY	1
SSP_ID	1

10.10.13.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.13.4 Example

```
GAS_DAY,USER_GBO_ID,SUB_NETWORK_ID,SWING_GAS_QUANTITY,SSP_ID
2004-01-01,USR1,1106,5,SSP1
2004-01-01,USR1,1106,11,SSP2
2004-01-01,USR1,1106,-2,SSP1
2004-01-01,USR1,1106,-14,SSP4
2004-01-01,USR1,1107,15,SSP5
2004-01-01,USR1,1107,-30,SSP2
2004-01-01,USR1,1107,15,SSP1
```

10.10.14 Monthly Interval-Meter Load Percentage Report (MILP)

10.10.14.1 Data flow Definition

Within 7 days after the end of each month the data estimation entity must notify users of its MILP.

10.10.14.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
USER_GBO_ID	1
SUB_NETWORK_ID	1
EFFECTIVE_DATE	1
MILP	1

10.10.14.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.14.4 Example

```
USER_GBO_ID,SUB_NETWORK_ID,EFFECTIVE_DATE,MILP  
USR1,2101,2004-09-05,10,10  
USR1,2102,2004-09-05,55,2  
USR1,2103,2004-09-05,85,37
```

10.10.15 Deemed Gas Quantity (DGQ)

10.10.15.1 Data flow Definition

Within 5 hours after the end of the gas day the data estimation entity must notify participants about the multi shipper allocation report data.

10.10.15.2 Physical Mapping

The data for this flow must be provided in an automated electronic file.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	1
PARTICIPANT_GBO_ID	1
ENERGY	1

10.10.15.3 Event Codes

Event Code Number
There are no event codes as the flow is outgoing flow.

10.10.15.4 Example

```
GAS_DAY, SUB_NETWORK_ID, PIPELINE_ID, PARTICIPANT_GBO_ID, ENERGY
2004-09-05, 1101, P, SSP1, 10
2004-09-05, 1102, D, SHP1, 2
2004-09-05, 1103, P, SSP2, 37
```

10.11 Temporary suspension of BAR calculations

10.11.1 Request of Suspension of BAR calculations (CALC-REQUEST)

10.11.1.1 Data flow Definition

Upon notification from network operator or pipeline operator Market Operator can request suspension of the BAR calculations.

10.11.1.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
AFFECTED_GAS_DAY	1
SUSPENSION_DATETIME	1
SUSPENSION_REASON	1

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10.12 BAR Recalculation

10.12.1 Request to Recalculate (RECALC-REQUEST)

10.12.1.1 Data flow Definition

Upon receiving this notification from Market Operator, GRMS must recalculate the BAR for the affected gas day and every gas day that has passed since.

10.12.1.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
AFFECTED_GAS_DAY	1
RECALC_REASON	1

10.12.2 Swing Service Over Threshold and Calculated With Estimated GPMD (SS-OVERTHRES) (SA ONLY). Will not be operable in the STTM as there is no Swing Service.

10.12.2.1 Data flow Definition

This notice is sent out from GRMS to Market Operator when the Swing Service is over the threshold (2TJ) in SA and has been calculated with estimated GPMD data as indicated by READ_TYPE_FLAG (see section 9.3.5).

Required Data:

SUBJECT FIELD: Swing Service Exceeds Threshold for GAS_DAY

CONTENTS: NETWORK_ID, GAS_DAY, SS_VALUE, EST_GBO_ID

10.12.2.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
NETWORK_ID	1
GAS_DAY	1
SS_VALUE	1
EST_GBO_ID	1

10.12.3 Difference between Estimated and Actual GPMD Values Exceeds Threshold (GPMD-DIFFOVER) (SA ONLY). Will not be operable in the STTM as there is no Swing Service.

10.12.4

10.12.4.1 Data flow Definition

This notice is sent out from GRMS to Market Operator when the difference between the Estimate and Actual GPMD values exceeds the threshold (2TJ). In the case where this has happened for multiple days, a separate notice is sent each time.

Required Data:

SUBJECT FIELD: Difference Between Estimate and Actual Exceeds Threshold on GAS_DAY

CONTENTS: GATEPOINT_ID, GAS_DAY, DIFF_VALUE

10.12.4.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
GATEPOINT_ID	1
GAS_DAY	1
DIFF_VALUE	1

10.13 Short Term Trading Market (STTM)

10.13.1 STTM Distribution System Allocation Data (STTM-DSA)

10.13.1.1 Data flow Definition

Weekly and montly data reports with the same frequency as the reporting of weekly, preliminary, final and revised STTM distribution system allocation data to the STTM.

10.13.1.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
SUB_NETWORK_ID	1
GAS_DAY	1

Physical Name	Optionality
USER_GBO_ID	1
UETW	1
UIW	1
UDBW	1
UAUAFG	1
USER_STTM_DSA	1
SETTLEMENT_RUN_ID	1

Note: the SETTLEMENT_RUN_ID field uses different text values to distinguish between the different types of STTM-DSA reports. For example, the SETTLEMENT_RUN_ID for weekly reports is “NAU”, for monthly preliminary reports it is “NAP”, for monthly final reports it is “NAF”, and for revised reports it is “NAR”.

10.14 Miscellaneous

10.14.1 General Notification (GEN-NOTIFY)

10.14.1.1 Data flow Definition

This mechanism of general notifications can be used by GRMS to notify market participants about occurrence of special events eg. suspension or resumption of market calculations.

10.14.1.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
FROM_GBO_ID	1
TO_GBO_ID	1
NOTIFY_CODE	1
NOTIFY_KEY_INFO	1
NOTIFY_DESCRIPTION	1

10.14.2 Request Estimate Usage in Market Calculation Report (GPMD-ESTPREQ)

10.14.2.1 Data flow Definition

This notice is sent out from Market Operator to GRMS in order to request a report on the usage of Estimated GPMD data (either provided by the Network Operator or generated by Market Operator) within the SA Market Calculations.

Required Data:

SUBJECT FIELD: Request for GPMD Estimate Usage Report

CONTENTS: GATEPOINT_ID, FROM_GAS_DAY, TO_GAS_DAY

10.14.2.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
GATEPOINT_ID	1
FROM_GAS_DAY	1
TO_GAS_DAY	1

10.14.3 Estimate Usage in Market Calculation Report (GPMD-ESTREPORT)

10.14.3.1 Data flow Definition

This report is to be generated by GRMS and provided to Market Operator as a result of a GPMD-ESTPREPREQ. The report will only contain information regarding days where estimated values were used in the market. It should be sent as an email attachment.

10.14.3.2 Physical Mapping

The data for this flow must be provided in a report.

Physical Name	Optionality
GAS_DAY	1
GATEPOINT_ID	1
EST_GBO_ID	1
EST_VALUE	1
EST_RECEIPT_DATETIME	1
ACT_VALUE	1
ACT_RECEIPT_DATETIME	1
ORIGINAL_SS	1
RECALCULATED_DATE	0-1
NEW_SS	0-1
NO_GPMD_FILES_RECIEVED	1

10.14.4 Start of Alternative Settlement Period Notification (SASP-NOTIFY) (WA only)

10.14.4.1 10.13.4.1 Data flow Definition

This notice is sent out from Market Operator to GRMS in order to declare the start of the alternative settlement period and request the “**asp data**” to be generated and delivered from the defined GAS_DAY to appointed Independent Reviewer or Independent Expert in the event of gas emergency.

Required Data:

SUBJECT FIELD: Start of Alternative Settlement Period Notification

CONTENTS: GAS_DAY

10.14.4.2 10.13.4.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
GAS_DAY	1

10.14.5 End of Alternative Settlement Period Notification (EASP-NOTIFY) (WA only)

10.14.5.1 10.13.5.1 Data flow Definition

This notice is sent out from Market Operator to GRMS in order to declare the end of the alternative settlement period and request the “asp data” to be generated and delivered to appointed Independent Reviewer or Independent Expert up to the GAS_DAY included in this notification.

Required Data:

SUBJECT FIELD: End of Alternative Settlement Period Notification

CONTENTS: GAS_DAY

10.14.5.2 10.13.5.2 Physical Mapping

The data for this flow must be provided in a notice.

Physical Name	Optionality
GAS_DAY	1

10.14.6 ASPDATA Report (ASPDATA)

10.14.6.1 10.13.6.1 Data flow Definition

This report is to the generated by GRMS and provided to appointed Independent Reviewer or Independent Exert as a result of a SASP-NOTIFY. The report will only contain information for one gas day (report day -3). It should be sent as an email attachment.

10.14.6.2 10.13.6.2 Physical Mapping

The data for this flow must be provided in a report.

Physical Name	Optionality
GAS_DAY	1
SUB_NETWORK_ID	1
PIPELINE_ID	0-1
SHIPPER_GBO_ID	0-1
USER_GBO_ID	0-1
ASPD_TYPE	1
ALLOCATION_TYPE	0-1
VALUE	1

11 APPENDIX – A CSV DATA DICTIONARY

Data types which are used only within aseXML formatted files are not defined in this data dictionary, as a definition is contained within the aseXML schema and a description of the usage of that data type is given within the relevant ‘Physical Transaction’ sections of this document.

11.1 Datatypes used in Both aseXML and CSV Formatted Files and in Notices

AseXML Element Name	CSV Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
Checksum	MIRN_CHECKSUM	The MIRN Checksum	NUM	1	0	NA	NA		
EffectiveFromDate	EFFECTIVE_DATE	Effective from date	DATE	10	NA	NA	NA		yyyy-mm-dd
HeatingValueZone	HV_ZONE	Encoding of sub-network and heating value zone (Identified as <i>CC</i> and <i>D</i> and defined in RMP appendix 1). This forms part of the gas zone code	CHAR	3	NA	NA	NA		
InitiatingRequestID	INITIATING_REQUEST_ID	The unique ID allocated by AEMO to a Registry Transaction	NUM	10	NA	NA	NA		999999999
MIRNStatus	MIRN_STATUS “Registered” = a service inlet has been installed at the delivery point “Commissioned”=Commissioned and not decommissioned or permanently removed (including after the delivery point has been reconnected) “Decommissioned”= disconnected (temporary) “Deregistered”= Permanently Removed	The MIRN Status	CHAR	16	NA	NA	NA	Registered Commissioned Decommissioned Deregistered	
N/A (in Notice)	NOTIFY_DESCRIPTION	Textual description as to why GRMS operations (allocation, reconciliation and swing service) have sent this message	CHAR	N/A	N/A	N/A	N/A		

AseXML Element Name	CSV Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
N/A (in Notice)	NOTIFY_KEY_INFO	Textual field that contains the key information for the notification. In case of suspension it can be the affected gas day.	CHAR	N/A	N/A	N/A	N/A		
NMI	MIRN	MIRN – Unique identification of a delivery point	CHAR	10	NA	NA	NA		
TransmissionZone	TRANSMISSION_ZONE	The encoding of network operator and licence areas (Identified as A and B and defined in RMP appendix 1). This forms part of the gas zone code	NUM	2	0	N	-		
N/A (in CSV payload)	BASE_LOAD	Base level of consumption for a delivery point	NUM	9	1	Y	MJ		
BaseLoad	NON_TEMP_SENSITIVE_BASELOAD	The average daily energy consumption unaffected by temperature	NUM	9	1	N	MJ		
N/A (in CSV payload)	HEATING_RATE	Temperature sensitive consumption	NUM	9	2	Y	MJ		
N/A (in Notice)	FROM_GBO_ID	GBO_ID of provider of the information	CHAR	10	N/A	N/A	N/A		
TemperatureSensitivityFactor	TEMP_SENSITIVE_HEATING_RATE	The rate at which energy consumption varies with changes to heating degree day.	NUM	9	2	N	NA		
N/A (in CSV payload)	TYPE_OF_READ	Type of a meter read	CHAR	1	NA	NA	NA	E-Estimated A-Actual S-Substituted D-Deemed	
N/A (in Notice)	TO_GBO_ID	GBO_ID of receiver of the information	CHAR	10	N/A	N/A	N/A		
N/A (in CSV Payload)	GAS_DAY	The gas day	DATE	N/A	N/A	N/A	N/A		
N/A (in CSV Payload)	GATEPOINT_ID	The ID of the gatepoint	CHAR	5	N/A	N/A	N/A		
N/A (in CSV Payload)	EST_GBO_ID	GBO_ID of estimated GPMD values	CHAR	10	N/A	N/A	N/A		
N/A (in CSV Payload)	EST_VALUE	Estimated value for that gatepoint on that gas day	NUM	9	2	N	MJ		

AseXML Element Name	CSV Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
N/A (in CSV Payload)	EST_RECEIPT_DATETIME	Time the EST_VAL was received	DATE	N/A	N/A	N/A	N/A		
N/A (in CSV Payload)	ACT_VALUE	Most recent actual value for that gatepoint on that gas day	NUM	9	2	N	MJ		
N/A (in CSV Payload)	ACT_RECEIPT_DATETIME	Time ACT_VALUE was received	DATE	N/A	N/A	N/A	N/A		
N/A (in CSV Payload)	ORIGINAL_SS	Swing Service value originally generated on the gas day	NUM	9	2	Y	TJ		
N/A (in CSV Payload)	RECALCULATED_DATE	Day Swing Service was recalculated	DATE	N/A	N/A	N/A	N/A	Date if recalculated, NULL if not	
N/A (in CSV Payload)	NEW_SS	Most recent swing service value generated for that day	NUM	9	2	Y	TJ	NULL if not recalculated	
N/A (in CSV Payload)	NUM_GPMD_FILES_RECIEVED	Number of GPMD files received for that Gas Day	NUM	2	0	N	N/A		
N/A (In Notice)	NETWORK_ID	Network ID of the section with high swing service	NUM	4	0	N	N/A		
N/A (In Notice)	DIFF_VALUE	Difference between ACT_VALUE and EST_VALUE	NUM	9	2	Y	TJ		
N/A (In Notice)	AFFECTED_GAS_DAY	Gas day affected by notice	DATE	N/A	N/A	N/A	N/A		
N/A (In Notice)	RECALC_REASON	Textual description as to why GRMS is to perform recalculation	CHAR	N/A	N/A	N/A	N/A		
N/A (In Notice)	SUSPENSION_DATETIME	Time that GRMS is to suspect calculations	DATE	N/A	N/A	N/A	N/A		
N/A (In Notice)	SUSPENSION_REASON	Textual description as to why GRMS is to suspend calculations	CHAR	N/A	N/A	N/A	N/A		
N/A (in CSV Payload)	FROM_GAS_DAY	The first gas day to be included in the period covered	DATE	N/A	N/A	N/A	N/A		
N/A (in CSV Payload)	TO_GAS_DAY	The final gas day to be included in the period covered	DATE	N/A	N/A	N/A	N/A		

11.2 CSV Datatypes used in CSV Formatted Files Only

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
ALLOCATION	Shipper's portion of the user's total estimated daily consumption.	NUM	10	0	N	MJ/%		
ALLOCATION_TYPE	Type of the allocation in an allocation instruction	CHAR	1	NA	NA	NA	Q-Quantity P-Percentage	
ALLOCATION_PRECEDENCE	Precedence for use of information	NUM	2	0	N	NA		
ANUSA	The user's adjusted non-user-specific amount of swing service for the pipeline for the sub-network for the gas day	NUM	10	0	Y	MJ		
AUAFG	Actual unaccounted for gas	NUM	10	0	Y	MJ		
AUIW	Anticipated interval-metered withdrawals	NUM	10	0	Y	MJ		
AUSA	The user's adjusted user-specific amount of swing service for the pipeline for the sub-network for the gas day.	NUM	10	0	Y	MJ		
BASE_LOAD	Non Temperature Sensitive Base Load The average daily energy consumption unaffected by temperature	NUM	10					
BID_PRICE	Price of bid	NUM	11	3	N	Cents / MJ		
BID_PRIORITY	A priority defined by the user in regards to off-market procurements.	NUM	2	0	N	NA		
COMMISSIONED_DATE	Date MIRN commissioned	DATE	10	NA	NA	NA		yyyy-mm-dd
CONSUMPTION_HR01	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR02	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR03	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR04	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR05	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR06	Energy Consumption for the Hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
CONSUMPTION_HR07	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR08	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR09	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR10	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR11	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR12	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR13	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR14	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR15	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR16	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR17	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR18	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR19	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR20	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR21	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR22	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR23	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CONSUMPTION_HR24	Energy Consumption for the Hour	NUM	10	0	Y	MJ		
CU_EFFECTIVE_DATE	The date on which the current user became the current user for the MIRN	DATE	10	NA	NA	NA		yyyy-mm-dd
DATA_GENERATION_DATE	The date on which the data was retrieved from the AEMO Registry.	DATE	10	NA	NA	NA		yyyy-mm-dd
DEEMED_INJECTION	Deemed Injections	NUM	10	0	Y	MJ		
DELTA_SBRA	Daily difference in summed basic reconciliation amount	NUM	10	0	Y	MJ		
DELTA_BWRA	Daily difference in basic withdrawal reconciliation amount	NUM	10	0	Y	MJ		
END_DATE	The end Date of a historical Data Request	DATE	10	NA	NA	NA		yyyy-mm-dd

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
ENERGY	Total energy value	NUM	11	0	Y	MJ		
ENERGY_HR01	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR02	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR03	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR04	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR05	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR06	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR07	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR08	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR09	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR10	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR11	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR12	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR13	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR14	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR15	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR16	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR17	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR18	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR19	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR20	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR21	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR22	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR23	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_HR24	Energy for the hour	NUM	11	0	Y	MJ		
ENERGY_INFLOW_HR01	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR02	Energy Inflow for the hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR03	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR04	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR05	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR06	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR07	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR08	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR09	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR10	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR11	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR12	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR13	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR14	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR15	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR16	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR17	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR18	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR19	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR20	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR21	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR22	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR23	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ENERGY_INFLOW_HR24	Energy Inflow for the hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR01	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR02	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR03	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR04	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR05	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR06	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR07	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR08	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR09	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR10	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR11	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR12	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR13	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR14	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR15	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR16	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR17	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR18	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR19	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR20	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR21	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR22	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR23	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
ESTIMATED_CONSUMPTION_AMOUNT_HR24	Estimated Energy Consumption for the Hour	NUM	10	0	Y	MJ		
FRB	Failed Retailer Business	CHAR	10	NA	NA	NA		
FSS	Swing Service Fee	NUM	11	2	N	Dollars		
GAA	Gate Point Adjustment Amount	NUM	10	0	Y	MJ		
GAS_DAY	The gas day upon which is the information	DATE	10	NA	NA	NA		yyyy-mm-dd
GATE_POINT_ID	Unique identification of a gate point – This is made up of ABCCE as defined in Appendix 1 of the RMP	CHAR	10	NA	NA	NA		
HDD_VALUE	Heating degree day Value	NUM	15	6		NA		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
HV_ZONE	Heating Value Zone	CHAR	3	NA	NA	NA	See RMP Appendix 1	
HISTORICAL_DAY	The historical gas day relating to the information	DATE	10	NA	NA	NA		yyyy-mm-dd
HOURLY_APPORTIONMENT_HR01	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR02	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR03	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR04	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR05	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR06	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR07	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR08	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR09	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR10	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR11	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR12	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR13	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR14	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR15	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR16	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR17	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR18	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR19	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR20	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR21	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR22	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR23	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		
HOURLY_APPORTIONMENT_HR24	Portion of Gate Point Inflow for the Hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
LAST_MODIFICATION_DATE	The last date of modification of data	DATE	10	NA	NA	NA		yyyy-mm-dd
LAST_READ_DATE	This is the last date for which meter reads have been supplied to AEMO prior to the day that is missing consumed energy data. The Network Operator is to supply all energy data calculated since this date. If no date is supplied then the network operator is to supply energy data calculated since commencement of the Retail Market.	DATE	10	NA	NA	NA		
MCP_TANUSA	The Marginal clearing price for the total of all adjusted non-user-specific amounts of Swing Service to be procured through the bid stack.	NUM	11	3	NA	Cents / MJ		
MCP_TSS	Marginal clearing price (MCP) for the total amount of swing service to be procured through the bid stack	NUM	11	3	NA	Cents / MJ		
METER_TYPE	The type of a meter	CHAR	1	NA	NA	NA	I – interval B – basic	
MILP	Monthly interval load percentage	NUM	3	0	N	%		
MIRN_COMMISSIONED_DATE	The date on which the MIRN was commissioned.	DATE	10	NA	NA	NA		yyyy-mm-dd
MIRN_STATUS_END_DATE	The end date for a MIRN State	DATE	10	NA	NA	NA		yyyy-mm-dd
MIRN_STATUS_START_DATE	The start date for a MIRN State	DATE	10	NA	NA	NA		yyyy-mm-dd
MRA	Miscellaneous reconciliation amount	NUM	10	0	Y	MJ		
NETOP_GBO_ID	Unique identification of a network operator	CHAR	10	NA	NA	NA		
NOMINATION_AMOUNT	Daily consumption nominated by a user	NUM	10	0	Y	MJ		
NORMALISATION_FACTOR	Normalisation Factor	NUM	11	6	Y	NA		
NOTIFICATION_TYPE	Type of requested change to shipper's register	CHAR	1	NA	NA	NA	A = Add D = Delete	
NSL	Net system load	NUM	11	0	Y	MJ		
NUSA	User's Non-specific swing service amount	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
PARTICIPANT_GBO_ID	Participant's (User, Network Operator, Pipeline Operator ...) GBO identification	CHAR	10	NA	NA	NA		
PARTICIPANT_LAST_CHANGE	The GBO Id of the participant who last initiated a data change.	CHAR	10	NA	NA	NA		
PCI	Pipeline corrected injection	NUM	10	0	Y	MJ		
PI	Pipeline Injection	NUM	10	0	Y	MJ		
PIPELINE_OPR_GBO_ID	Pipeline Operator GBO identification	CHAR	10	NA	NA	NA		
PIPELINE_ID	Unique identification of a pipeline	CHAR	1	NA	NA	NA	Appendix A.6	
PIPELINE_RATIO	Ratio for a flow ratio control pipeline	NUM	3	2	Y	NA		
PRICE	Price	NUM	11	3	N	Cents / MJ		
PROFILE_FORECAST_HR01	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR02	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR03	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR04	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR05	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR06	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR07	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR08	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR09	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR10	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR11	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR12	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR13	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR14	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR15	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR16	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR17	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR18	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR19	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR20	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR21	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR22	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR23	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_FORECAST_HR24	Forecasted Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILE_HR01	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR02	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR03	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR04	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR05	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR06	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR07	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR08	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR09	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR10	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR11	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR12	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR13	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR14	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR15	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR16	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR17	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR18	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR19	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
PROFILE_HR20	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR21	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR22	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR23	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILE_HR24	Portion of Daily Energy Value for the Hour	NUM	3	0	Y	%		
PROFILED_NOMINATION_HR01	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR02	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR03	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR04	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR05	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR06	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR07	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR08	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR09	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR10	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR11	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR12	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR13	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR14	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR15	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR16	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR17	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR18	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR19	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR20	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR21	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR22	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR23	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PROFILED_NOMINATION_HR24	Nominated Energy Value for the Hour	NUM	10	0	Y	MJ		
PUSA	User's Penalty Swing Service Amount	NUM	10	0	Y	MJ		
REASON_CODE	Code indicating the reason for invalid information	CHAR	5	NA	NA	NA		
REASON_DESCRIPTION	Description of the reason for invalid information	CHAR	255	NA	NA	NA		
REMOVAL_REASON	Description of the reason	CHAR	255	NA	NA	NA		
ROLR_ID	The GBO ID of a ROLR	CHAR	10	NA	NA	NA		
ROLR_DATE	The date the designated RoLR became FRO	DATE	10	NA	NA	NA		
SETTLEMENT_RUN_ID	Identification of STTM Rreport Run	CHAR	3	NA	NA	NA		
SHIPPER_GBO_ID	Shipper's GBO Id – Unique identification of a shipper	CHAR	10	NA	NA	NA		
SMALL_CUSTOMER	WA: Holds an indicator as to whether the customer is a small use customer or not. SA: The SMALL_CUSTOMER flag = "Y" indicates a Basic meter, "N" indicates an Interval meter	CHAR	1	NA	NA	NA	Y N	
SS	Swing Service	NUM	10	0	Y	MJ		
SSAR	Swing Service Amount Repaid	NUM	10	0	Y	MJ		
SSP_ID	Swing Service Provider GBO Id – Unique identification of a swing service provider	CHAR	10	NA	NA	NA		
SSP_R_ID	Swing Service Provider GBO Id – Unique identification of a swing service provider who is unwinding the SS	CHAR	10	NA	NA	NA		
START_DATE	The start Date of a historical Data Request	DATE	10	NA	NA	NA		yyyy-mm-dd
SUB_NETWORK_ID	Sub-network Id – Unique identification of a sub-network	CHAR	4	NA	NA	NA	Appendix A.5	
SUBS_METHOD	Defines the substitution method used for substitution	CHAR	1	NA	NA	NA	D-Like day I-Last Valid E-Equal amt L-Last available	

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
SWING_GAS_QUANTITY	Swing Gas Quantity energy quantity required by a participant that has been profiled	NUM	11	0	Y	MJ		
SWING_TYPE	Defines the type of Swing service in question. Either park or loan service.	CHAR	1	NA	NA	NA	P-Park L-Loan	
TANUSA	Total adjusted non-user specific swing amount	NUM	10	0	Y	MJ		
TAUSA	Total adjusted user specific swing amount	NUM	10	0	Y	MJ		
TBRA	Total basic reconciliation amount	NUM	10	0	Y	MJ		
TBWRA	Total basic withdrawal reconciliation amount	NUM	10	0	Y	MJ		
TPI	Total delta pipeline injection	NUM	10	0	Y	MJ		
TIRA	Total interval reconciliation amount	NUM	10	0	Y	MJ		
TMRA	Total miscellaneous reconciliation amount	NUM	10	0	Y	MJ		
TOTAL_DAILY_CONSUMPTION	Total Daily Consumption for a interval delivery point	NUM	10	0	Y	MJ		
TOTAL_EW_CUSTOMERS	Total Customer count	NUM	10	0	N	NA		
TRA	Total Reconciliation amount	NUM	10	0	Y	MJ		
TRANSMISSION_ZONE	Transmission Zone	NUM	2	0	N	NA	See RMP Appendix 1	
TSS	Total swing service for bid stack	NUM	10	0	Y	MJ		
TUSA	Total user specific swing amount	NUM	10	0	Y	MJ		
TUNUSA	Total non-user specific swing amount	NUM	10	0	Y	MJ		
PROCESS_START_DATE	The date on which a transaction (business process) started (as notified by AEMO). Used in association with the relevant MORN to inform participants of transactions which have been cancelled as the result of a ROLR event	DATE	10	NA	NA	NA		yyyy-mm-dd
UBW	Users basic withdrawal	NUM	10	0	Y	MJ		
UDBW	User's Distributed Basic Withdrawal	NUM	10	0	Y	MJ		
UDURA	User's daily unaccounted for gas reconciliation amount	NUM	10	0	Y	MJ		
UDW_TOTAL	Total user deemed withdrawal	NUM	10	0	Y	MJ		

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signed	Units	Enumeration	Mask
ABS_UETW_TOTAL	The absolute value of the total User estimated withdrawal	NUM	10	0	Y	MJ		
UEBW	User's total estimated basic withdrawal	NUM	10	0	Y	MJ		
UETW	User's total estimated withdrawal	NUM	10	0	Y	MJ		
UIW	User's total interval withdrawal	NUM	10	0	Y	MJ		
URAA	User's Reconciliation Adjustment amount	NUM	10	0	Y	MJ		
USA	User specific swing service amount	NUM	10	0	Y	MJ		
USER_DEEMED_WITHDRAWAL	The deemed withdrawal by a user from the sub-network	NUM	10	0	Y	NA		
USER_EW_CUSTOMERS	User customer count	NUM	10	0	N	NA		
USER_GBO_ID	User's GBO Id – Unique identification of a user	CHAR	10	NA	NA	NA		
USER_PROFILE_TYPE	Te type of the component of the user's profile forecast	CHAR	7				UPF UBPF UIPF RPF SPF UUAFGPF	
USS	User's Swing Service Amount	NUM	10	0	Y	MJ		
UAUAFG	User's Actual Unaccounted for Gas	NUM	10	0	Y	MJ		
UUAFG	Users unaccounted for gas	NUM	10	0	Y	MJ		
UUAFGRA	User's Unaccounted for gas reconciliation amount	NUM	10	0	Y	MJ		
UUAFGRAA	Users unaccounted for gas reconciliation adjustment amount	NUM	10	0	Y	MJ		
READ_TYPE_FLAG	Flag marking whether the read has the actual value, or if it has been estimated.	CHAR	1	NA	NA	NA	A = Actual E = Estimate	
REPORT_DATE	Date of report	DATE	10	NA	NA	NA		yyyy-mm-dd
MOVEMENT	Last transfer status relative to User	CHAR	7				Won Lost None	
USER_STTM_DSA	User's STTM Distribution System Allocation Data	NUM	10	0	Y	MJ		

11.3 CSV Datatypes used in aseXML Formatted Files Only (as CSV Payload)

Element Name	Description	Log. Type	Log. Length	Dec. Length	Signe d	Units	Enumeration	Mask
NMI	MIRN – Unique identification of a delivery point	CHAR	10	NA	NA	NA		
NMI_CHECKSUM	MIRN – check sum	CHAR	10	NA	NA	NA		
PREVIOUS_READ_DATE	The date that the previous reading for the MIRN was taken. ccyy-mm-dd	DATE	10	NA	NA	NA		ccyy-mm-dd
CURRENT_READ_DATE	The date that the current reading for the MIRN was taken. ccyy-mm-dd	DATE	10	NA	NA	NA		ccyy-mm-dd
CONSUMED_ENERGY	Energy flow measured in megajoules.	NUM	11	0	Y	MJ		

11.4 SUB_NETWORK_ID enumeration

11.4.1 Western Australia

SUB_NETWORK_ID	Description
1101	Geraldton (Nangetty Road)
1102	Eneabba
1103	Muchea
1404	The Vines
1105	Ellenbrook
1106	Metro North
1107	Metro South
1108	Barter Road, Naval Base
1109	Rockingham
1110	Pinjarra
1111	Oakley Road (Pinjarra)
1112	Harvey
1113	Kemerton
1114	Clifton Road, Bunbury
1315	Albany
1216	Kalgoorlie

11.4.2 South Australia

SUB_NETWORK_ID	Description
2101	Adelaide Metropolitan
2102	Waterloo Corner
2103	Virginia
2104	Wasleys
2105	Freeling
2106	Nurioopta
2160	Angaston A
2108	Murray Bridge
2109	Berri
2210	Mildura
2111	Peterborough
2112	Port Pirie
2113	Whyalla
2114	Mount Gambier
2150	Daveyston
2151	Burra
2152	Nangwarry
2153	Snuggery

SUB_NETWORK_ID	Description
2154	Whyalla A
2155	Whyalla B
2156	Whyalla C
2157	Smithfield
2158	Penola
2159	Port Bonython

11.5 PIPELINE_ID enumeration

11.5.1 Western Australia

PIPELINE_ID	Description
D	Dampier to Bunbury Natural Gas Pipeline
P	Parmelia Pipeline
G	Goldfields Gas Transmission Pipeline
L	LPG supply

11.5.2 South Australia

PIPELINE_ID	Description
S	SEAGas Pipeline
M	Moomba to Adelaide Pipeline
K	Katnook Pipeline

12 APPENDIX B – EVENT CODES

aseXML Message Level Event Codes:

Event	Description
5	Uncompression failure
6	Message too big
5805	Unknown Transaction

CSV Message Level Event Codes:

Event	Description
5	Uncompression failure
6	Message too big
5800	Duplicate zip filename
5801	Zip filename is not the same as the csv filename
5802	csv message does not end with .CSV
5803	Initiator GBO ID in the filename does not match the user directory
5804	Recipient GBO ID in the filename does not match GRMS id
5805	Unknown Transaction
5806	Initiator GBO ID is not active in the market
5807	Duplicate unique ID in filename
5808	Invalid unique ID in filename

The Registry:

Event	Description	Invoked by Transaction
0	(No description given)	CATSChangeResponse ²
0	(No description given)	CATSObjectionResponse
201	Missing mandatory data item	CATSChangeRequest
201	Missing mandatory data item	GasMeterNotification/ MeterFix
201	Missing mandatory data item	CATSChangeAlert
202	DCN Effective Date not a valid date	Data Change Notice (Notice)
202	Gas Zone not found	Data Change Notice (Notice)
202	Gas Zone not found	GasMeterNotification/ MeterFix
202	Invalid XML element found	CATSChangeRequest
202	Invalid XML element found	CATSChangeRequest
202	Invalid XML element found	CATSChangeWithdrawal
202	Invalid XML element found	CATSObjectionRequest
202	Invalid XML element found	CATSObjectionWithdrawal
202	Invalid XML element found	Data Change Notice (Notice)
202	Invalid XML element found	Error Correction Notice (Notice)
202	Invalid XML element found	GasMeterNotification/ MeterFix
202	Invalid XML element found	GasMeterNotification/ MIRNStatusUpdate
202	Invalid XML element found	CATSChangeAlert
202	MIRN not found	Error Correction Notice (Notice)
202	MIRN not found	GasMeterNotification/ MIRNStatusUpdate
202	Participant not responsible for supplied MIRN	Bulk Data Request (Notice)
2039	Correction BP referred to by MIRN does not exist	Error Correction Notice (Notice)
3000	Transfer may not be correct-d - completion date too far in past	CATSChangeRequest
3001	Earliest Change Date not a valid date	CATSChangeRequest
3002	Earliest Change Date supplied is too early	CATSChangeRequest
3002	Earliest Change Date supplied is too late	CATSChangeRequest
3007	Incorrect Transfer not found	CATSChangeRequest
3007	ROLR is not associated with MIRN	CATSObjectionRequest
3007	Supplied correction IRID is not for New Connection or Removed MIRN	Error Correction Notice (Notice)
3007	Supplied IRID and objection IRID are not associated	CATSObjectionWithdrawal
3007	Supplied IRID not found	CATSChangeWithdrawal
3007	Supplied IRID not found	CATSObjectionRequest
3007	Supplied IRID not found	CATSObjectionWithdrawal
3007	Supplied IRID not found	Error Correction Notice (Notice)
3007	Supplied objection IRID not found	CATSObjectionWithdrawal
3007	Transaction to be corrected is not yet complete	CATSChangeRequest
3007	Supplied IRID not found	CATSChangeAlert
3007	Transfer may not be corrected - not last transaction	CATSChangeRequest
3011	Incoming User is Current User	CATSChangeRequest

² Note that an event code of '0' may be invoked by other transactions

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3011	User does not have shipper for network section	CATSChangeRequest
3011	User does not have shipper for network section	GasMeterNotification/MIRNStatusUpdate
3013	Network Operator is not associated with MIRN	CATSObjectionRequest
3013	Network Operator is not associated with MIRN	Data Change Notice (Notice)
3013	Network Operator is not associated with MIRN	Error Correction Notice (Notice)
3013	Network Operator is not associated with MIRN	GasMeterNotification/ MIRNStatusUpdate
3013	Network Operator is not associated with MIRN	GasMeterNotification/ MIRNStatusUpdate
3014	DCN Effective Date supplied is too late	Data Change Notice (Notice)
3014	Standing Data item may not be changed	Data Change Notice (Notice)
3016	Participant is not relevant to this transaction	CATSObjectionRequest
3016	Participant is not relevant to this transaction	CATSChangeAlert
3016	Sending Participant is not the previous user	CATSChangeRequest
3018	Participant GBO Id is not active	CATSChangeRequest
3018	Participant GBO Id is not active	CATSChangeWithdrawal
3018	Participant GBO Id is not active	CATSObjectionRequest
3018	Participant GBO Id is not active	Data Change Notice (Notice)
3018	Participant GBO Id is not active	Error Correction Notice (Notice)
3018	Participant GBO Id is not active	GasMeterNotification/ MeterFix
3018	Participant GBO Id is not active	GasMeterNotification/ MIRNStatusUpdate
3018	Participant GBO Id is not active	GasMeterNotification/ MIRNStatusUpdate
3018	Participant GBO Id is not active	CATSChangeAlert
3018	Participant GBO Id is not active	CATSObjectionWithdrawal
3022	Customer is not 'small use' for Transfer move-in	CATSChangeRequest
3022	Meter is not of type 'Basic' for Transfer move-in	CATSChangeRequest
3022	Other conflicting Business process(es) in progress	CATSChangeRequest
3025	Request Withdrawal business process not found	CATSChangeWithdrawal
3025	Request withdrawal not valid for this business process type	CATSChangeWithdrawal
3025	Request withdrawal refers to business process which is not in progress	CATSChangeWithdrawal
3026	Participant requesting withdrawal did not initiate business process	CATSChangeWithdrawal
3027	Objection already withdrawn for objection IRID supplied	CATSObjectionWithdrawal
3028	Objection received outside of lodgement window	CATSObjectionRequest
3028	Objection Withdrawal received outside of lodgement window	CATSObjectionWithdrawal
3029	Incoming User is the ROLR	CATSChangeRequest
3029	Objection withdrawal not valid for this business process type	CATSObjectionWithdrawal
3029	Sending Participant not valid for role 'network operator'	Data Change Notice (Notice)
3029	Sending Participant not valid for role 'user'	CATSChangeRequest
3030	Objection Reason is not valid for Participant Role	CATSObjectionRequest
3031	Objection is not valid for transfer move-in	CATSObjectionRequest
3031	Objection not valid for this business process type	CATSObjectionRequest
3031	Objection refers to business process which is not in progress	CATSObjectionRequest
3031	Objection refers to unknown business process	CATSObjectionRequest

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3031	Objection withdrawal refers to unknown business process	CATSOBJECTIONWithdrawal
3031	Alert refers to unknown business process	CATSCheckAlert
3031	Alert refers to a business process which is not in progress	CATSCheckAlert
3032	Objection withdrawal refers to business process which is not in progress	CATSOBJECTIONRequest
3033	Objection IRID referred to was raised by a different participant	CATSOBJECTIONWithdrawal
3035	MIRN status not 'commissioned' or 'decommissioned'	CATSCheckRequest
3035	MIRN to be corrected does not exist	CATSCheckRequest
3038	MIRN not found	CATSCheckRequest
3200	Other conflicting Business process(es) in progress	Error Correction Notice (Notice)
3200	Other conflicting Business process(es) in progress	GasMeterNotification/ MIRNStatusUpdate
3400	New Connection may not be corrected - not last transaction	Error Correction Notice (Notice)
3400	Participant GBO Id supplied not valid for role 'user'	CATSCheckWithdrawal
3400	Participant GBO Id supplied not valid for role 'user'	GasMeterNotification/ MeterFix
3400	Removed MIRN may not be corrected - not last transaction	Error Correction Notice (Notice)
3400	Sending Participant GBO Id not found	GasMeterNotification/ MeterFix
3400	Sending Participant not valid for role 'network operator'	Error Correction Notice (Notice)
3400	Sending Participant not valid for role 'network operator'	GasMeterNotification/ MeterFix
3400	Sending Participant not valid for role 'network operator'	GasMeterNotification/ MIRNStatusUpdate
3402	Meter Type is not INTERVAL or BASIC	GasMeterNotification/ MeterFix
3407	Sending Participant GBO Id not found	CATSCheckRequest
3407	Sending Participant GBO Id not found	Data Change Notice (Notice)
3407	Sending Participant GBO Id not found	Error Correction Notice (Notice)
3407	Sending Participant GBO Id not found	GasMeterNotification/ MIRNStatusUpdate
3407	Sending Participant GBO Id not found	CATSCheckAlert
3407	Sending Participant GBO Id not found	CATSOBJECTIONWithdrawal
3410	Invalid MIRN status	All
3410	MIRN status is not 'commissioned'	GasMeterNotification/ MIRNStatusUpdate
3410	MIRN status is not 'decommissioned'	GasMeterNotification/ MIRNStatusUpdate
3410	MIRN status not 'commissioned' or 'decommissioned'	GasMeterNotification/ MIRNStatusUpdate
3411	Disconnection Effective Date not valid	GasMeterNotification/ MIRNStatusUpdate
3411	Invalid End Date	Bulk Data Request (Notice)
3411	Invalid Start Date	Bulk Data Request (Notice)
3411	New Connection Effective Date not a valid date	GasMeterNotification/ MeterFix
3411	New Connection Effective Date supplied is too late	GasMeterNotification/ MeterFix
3411	New Connection may not be corrected - completion date too far in past	Error Correction Notice (Notice)
3411	Permanently Removed Effective Date not valid	GasMeterNotification/ MIRNStatusUpdate
3411	Permanently Removed Effective Date not valid	GasMeterNotification/ MIRNStatusUpdate
3411	Reconnection Effective Date not valid	GasMeterNotification/ MIRNStatusUpdate
3411	Removed MIRN may not be corrected - completion date too far in past	Error Correction Notice (Notice)
3411	Transaction to be corrected did not take place on specified date	Error Correction Notice (Notice)
3411	Cancellation too late	CATSCheckWithdrawal

3413	MIRN already exists	GasMeterNotification/ MeterFix
3662	Invalid MIRN checksum	CATChangeRequest
3662	Invalid MIRN checksum	GasMeterNotification/ MeterFix
3662	Invalid MIRN checksum	GasMeterNotification/ MIRNStatusUpdate

SA Only - RoLR Event Codes in INT801 Report:

Event	Description	Invoked by Transaction
3401	MIRN unknown to GRMS	Customer and Site Details (T900)
3403	Checksum does not match MIRN	Customer and Site Details (T900)
3412	Data set incomplete	Customer and Site Details (T900)
3555	MIRN belongs to a different User	Customer and Site Details (T900)
3556	MIRN details missing	Customer and Site Details (T900)

Balancing Allocation and Reconciliation:

Event Codes	Description
3204	'StartDate does not dovetail'
3205	'Start Date not before End Date'
3205	'Invalid End Date'
3205	'Gas Date may not be in the future'
3206	'Invalid Start Date'
3208	'Invalid Meter Reading type'
3209	'Invalid DPI'
3210	'Invalid Checksum for the Delivery Point Id'
3213	'Mandatory Field Missing'
3213	'Missing element in Meter Reading'
3214	'Invalid value for reading'
3214	'Invalid Sub Network'
3216	'Invalid date format or date is missing'
3410	'DPI Found in database but not active'
3655	'Start Date too old'
3673	'Invalid data in aseXML Field'
3676	'Reading of better quality for this metering period already exists for this meter'
5200	Invalid Gas Day
5202	'Data not in time for gas day.'
5202	Instructions not received within the required time frame
5203	'Invalid pipeline identification'
5204	'Invalid sub-network identification'
5205	'Invalid swing service provider identification'
5206	'Null Swing Type Provided.'
5206	'Invalid swing service type'

5207	Invalid priority
5207	'Invalid Numerical Value'
5207	'Null Price Provided.'
5207	'Null Number Provided.'
5208	'Duplicate CSV Entry.'
5208	Duplicate identification
5213	'Invalid User.'
5214	'User not registered to receive swing gas for the current Swing Service Provider'
5215	'Swing Service Provider not registered for sub-network'
5215	'Swing service provider not registered for the sub-network'
5217	'Invalid Allocation Type'
5217	'Null Allocation Type Provided'
5400	Invalid shipper identification
5401	Invalid pipeline operator identification
5402	Invalid network operator identification
5403	Invalid energy value
5403	'Null Energy Value Provided.'
5405	The required number of values for the daily profile was not specified.
5405	'Profile does not have enough values.'
5405	'The required number of values for the daily profile was not specified.'
5406	Sum of the hourly allocation of the profile does not equal 100%
5406	'Profile does not add up to 100%.'
5406	'Sum of the hourly allocation of the profile does not equal 100%'
5412	'Null Profile Provided'
5213	Invalid user identification
5413	Invalid participant type
5414	'Null Participant ID'
5415	'Invalid Participant ID'
5215	Swing service provider not registered for the sub-network
5416	'Date For GasDay Is Null'
5216	Swing service provider not registered for the pipeline
5217	Invalid allocation type
5418	'Invalid Format for Profile Value'
5420	'Invalid Pipeline Operator for the Pipeline.'
5220	Allocation specified does not equal to 100%
5221	Allocation specifies more than 100%
5224	Invalid price
5424	'Hour should be between 1 and 24'
5426	'User is not associated with sub-network'
5426	'Invalid Sender.'
5427	'Could not calculate total energy inflow with given data'
5427	'Missing at least one hourly interval meter reading'
5427	'Value Provided is not positive.'
5429	'Invalid DPT'
5600	Invalid participant Identifier
5601	Sender is not permitted to provide this information
5602	Invalid profile
5603	Invalid gate point identification

5603	'Invalid gate point identification'
5604	Invalid delivery point identifier
5605	Invalid delivery point check sum
5606	Invalid reading type
5607	Invalid Percentage
5608	Gate Point is valid but de-active
5609	Missing Hourly Value
5610	Malformed CSV

13 APPENDIX C – REASON CODES AND DESCRIPTIONS

CancellationReasonCodes (CRC) and Descriptions:

Code	Description
CRC000	Business process cancelled due to ROLR event ³
CRC001	Transfer Cancelled: Objection upheld
CRC002	Transfer Cancelled: Request withdrawn
CRC003	Transfer Cancelled: MIRN permanently removed
CRC004	Transfer Cancelled: ROLR event occurred
CRC005	Transfer Cancelled: Read not received
CRC006	Transfer Cancelled: Market Operator multiple data change transaction
CRC007	Error Correction (Transfer) Cancelled: Objection upheld
CRC008	Error Correction (Transfer) Cancelled: Request withdrawn
CRC009	Error Correction (Transfer) Cancelled: MIRN permanently removed
CRC010	Error Correction (Transfer) Cancelled: ROLR event occurred
CRC011	Error Correction (Transfer) Cancelled: Market Operator multiple data transaction
CRC012	Data Change Notice Cancelled: MIRN permanently removed
CRC013	Data Change Notice Cancelled: Market Operator multiple data transaction
CRC014	Disconnection Cancelled: MIRN permanently removed
CRC015	Disconnection Cancelled: Read not received
CRC016	Disconnection Cancelled: Market Operator multiple data transaction
CRC017	Reconnection Cancelled: MIRN permanently removed
CRC018	Reconnection Cancelled: Market Operator multiple data transaction
CRC019	Reconnection Cancelled: Read not received
CRC020	Permanent Removal Cancelled: Market Operator multiple data transaction
CRC021	Permanent Removal Cancelled: Read not received
CRC022	Reconnection cancelled: Concurrent disconnection received
CRC023	Disconnection cancelled: Concurrent reconnection received
CRC024	Permanent Removal cancelled: MIRN permanently removed

DataChangeReasonCodes(DCR) and Descriptions:

Code	Description
DCR001	Transfer
DCR002	Error correction (Transfer)
DCR003	Error correction (MIRN permanently removed)
DCR004	Change to standing data
DCR005	Change to MIRN status
DCR006	MIRN permanently removed
DCR007	New Connection
DCR008	Error correction (New Connection)

³ This code will be used internally to GRMS, and will not be communicated to the market.

14 APPENDIX D CODING OF GAS ZONES AND GATE POINTS

14.1 Coding of gas zones

To minimise the number of data fields required in the AEMO Registry and the *network operators' databases* the concepts of licence area, *sub-network* and *heating value* zones are all coded using a single 5 character gas zone code, as follows:

{Note: The following code is split into two components:

- (a) AB – which is held in the existing two digit transmission zone and identifies the *network operator*, licence and *Access Arrangement* coverage; and
- (b) CCD – which is held in the existing three digit *heating value* zone and identifies the *sub-network* and *gas zone* within the *sub-network*. }

ABCCD, where:

A is used to indicate who is the *network operator*. **A** is an alpha numeric field that can range from **2** to **Z**:

2 = Envestra

B is used to segregate by licence area and *Access Arrangement Coverage*. **B** is a numerical field:

Envestra in SA: 1 = Envestra SA GDS

2 = Envestra Mildura GDS

CC is a 2 character alphanumeric code used to identify the *sub-network* within a *GDS* and the code varies dependant on the **A** code:

Envestra in SA (ie where A = 2) CC equals as follows:

01 = Adelaide Metropolitan

02 = Waterloo Corner

03 = Virginia

04 = Wasleys

05 = Freeling

06 = Nuriootpa

07 = Angaston

08 = Murray Bridge

09 = Berri

10 = Mildura

11 = Peterborough

12 = Port Pirie

13 = Whyalla

14 = Mount Gambier

Farm tap sub-networks:

- 50 = Daveyston
- 51 = Burra
- 52 = Nangwarry
- 53 = Snuggery
- 54 = Whyalla A
- 55 = Whyalla B
- 56 = Whyalla C
- 57 = Smithfield
- 58 = Penola
- 59 = Port Bonython
- 60 = Angaston A
- 61 = Two Wells
- 62 = Pallamana

D is used to identify a *heating value zone* within a *sub-network*:

For Envestra SA, D =

- 1 = Moomba to Adelaide Pipeline (MAP) or Riverland
- 2 = MAP + SEAGAS
- 3 = Katnook

Examples:

The Adelaide Metro sub network in Envestra’s Adelaide GDS supplied by MAP	21011
The Adelaide Metro sub network in Envestra’s Adelaide GDS supplied by a combined gas from MAP and SEAGAS	21012
The Port Bonython Farmtap in Envestra’s SA Country GDS supplied by MAP	21591
The Smithfield Farmtap in Envestra’s Adelaide GDS supplied by MAP	21571
The Mount Gambier sub network in Envestra’s South East GDS	21143

14.2 Coding of gate points

A *gate point* for a *sub-network* means a point (which may be the same location as a physical gate point), which is designated as the *gate point* under clause **Error! Reference source not found.** for the *sub-network* from a *pipeline* and it is the sum of all “*physical gate points*” from that *pipeline* on a *sub-network*.

Examples:

In South Australia there are 4 gate stations (each with an associated *physical gate point*) supplying gas to the Adelaide Metropolitan *sub-network* in Envestra's SA GDS, three from the MAP (Gepps Cross, Elizabeth and Taperoo) and one from the SEAGAS Pipeline at Cavan. As a result there are two *gate points* one that is the aggregate of the 3 MAP physical gate points and one equating to the SEAGAS *physical gate point*.

The same base coding is used to identify *gate points* at which gas is supplied into each *sub-network* from each *pipeline*. The coding used is as follows:

ABCCE, where:

A is used to indicate who is the *network operator*. **A** is an alpha numeric field that can range from **2** to **Z**, refer above for details.

B is used to segregate by licence area and *Access Arrangement Coverage*. **B** is a numerical field, refer above for details.

CC is a 2 character alphanumeric code used to identify the *sub-network* within a *GDS* and the code varies dependant on the **A** code, refer above for details.

E is used to indicate which *pipeline* the gate is connected to. **E** is an alpha field that can range from **A** to **Z**:

Envestra in SA: S = SEAGas Pipeline

M = Moomba to Adelaide Pipeline

K = Katnook Pipeline

Examples:

The gate point on the MAP that supplies the Adelaide Metro sub network in Envestra's SA GDS	2101M
The gate point on the SEAGas Pipeline that supplies the Adelaide Metro sub network in Envestra's SAGDS	2101S
The gate point on the Katnook Pipeline that supplies the Mount Gambier sub network in Envestra's SA GDS	2114K
The gate point on the MAP that supplies the Mildura sub network in Envestra's Mildura GDS	2210M