

STTM PARTICIPANT BUILD PACK BUSINESS VALIDATIONS ADDENDUM

PREPARED BY: STTM Establishment Project

DOCUMENT REF: 291385

VERSION NO: 8

DATE: [30 April 2014](#)

FINAL :

Disclaimer

This document is made available to you on the following basis:

Purpose

This STTM Participant Build Pack Business Validations Addendum Guide (“Guide”) has been produced by the Australian Energy Market Operator Limited (AEMO) to provide information about STTM as at the date of publication.

No substitute

This Guide is not a substitute for, and should not be read in lieu of, the current National Electricity or Gas Rules (“Rules”), National Electricity or Gas Law (“Law”), or any other relevant laws, codes, rules, procedures or policies. Further, the contents of this Guide do not constitute legal or business advice and should not be relied on as a substitute for obtaining detailed advice about the Law, the Rules, or any other relevant laws, codes, rules, procedures or policies, or any aspect of the national electricity market or the electricity industry.

No warranty

While AEMO has used due care and skill in the production of this Guide, neither AEMO, nor any of its employees, agents and consultants make any representation or warranty as to the accuracy, reliability, completeness or suitability for particular purposes of the information in this Guide.

Limitation of liability

To the extent permitted by law, AEMO and its advisers, consultants and other contributors to this Guide (or their respective associated companies, businesses, partners, directors, officers or employees) shall not be liable for any errors, omissions, defects or misrepresentations in the information contained in this Guide, or for any loss or damage suffered by persons who use or rely on such information (including by reason of negligence, negligent misstatement or otherwise). If any law prohibits the exclusion of such liability, AEMO’s liability is limited, at AEMO’s option, to the re-supply of the information, provided that this limitation is permitted by law and is fair and reasonable.

Copyright

Copyright © 2014 Australian Energy Market Operator Limited. All rights reserved.

Trademark Notices

Microsoft Excel (Excel) is a trademark of Microsoft Corporation in the United States and/or other countries.

Distribution

Available to the public.

Prepared by

IMT Gas IT Support

Last update

Friday, 2 May 2014 11:19 AM

Notes

No notes

Documents made obsolete

The release of this document changes only the version of STTM Participant Build Pack Business Validations Addendum Guide.

Further Information

For further information, please visit AEMO’s website www.aemo.com.au or contact:

AEMO Information and Support Hub

Phone: 1300 AEMO 00 (1300 236 600) and follow the prompts.

E-mail: supporthub@aemo.com.au

Version History

VERSION	DATE	AUTHOR(S)	CHANGES AND COMMENTS
1	19/10/2009	A.Nambiar	Initial draft
	28/10/2009	G. Eldon D. Chau L. Chasemore A. Nambiar	Transaction details added
2	5/10/2009	G. Eldon L. Chasemore A. Nambiar	Updated based on feedback from internal review
2A	18/11/2009	A. Nambiar	MSV confirmation updated
2B	24/11/2009	A. Nambiar	Updated the values listed for facilityid to include network facilities
	27/11/2009	A. Nambiar	Updated data dictionary to include MSV Confirmation Transaction references Updated eventseverity field length Updated CG commencement date field validation
2C	07/01/2010	A.Nambiar	Editorial changes to correct spelling errors
2D	20/01/2010	A.Nambiar	Updated description of MOS Step Allocation process validation relating to the "Single day per MOS Step Allocation File" rule.
	10/03/2010	A.Nambiar	Updated facility/registered service/most step allocation transaction contexts to provide more information on how the file quality types are handled by the system (Update, Daily, Preliminary, Final and Revision).
2E	07/05/2010	A.Nambiar	Updated the scope definition so that the STTM Rules and Procedures are correctly referenced. Updated preconditions for Facility Allocations and MOS Step Allocations for clarity.
2F	24/05/2010	A.Nambiar	Updated the "variations" section for Facility Allocations, Registered Facility Service Allocations and MOS Step Allocations to provide more information on how allocations must be submitted for a billing period.
2G	26/07/2010	A.Nambiar	Updated with information on STTM Day 2 changes affecting allocation validations.
2H	21/02/2011	C.Poon	Updated STTM Reports Specifications version to version 9.
2I	21/03/2011	C.Poon	Updated STTM Reports Specifications version to version 9A.
2J	28/03/2011	C.Poon	Updated STTM Reports Specifications version to version 9B.
3	14/04/2011	C.Poon	Updated Data Dictionary. Added Event Code 4809, 4810 to Facility Hub

VERSION	DATE	AUTHOR(S)	CHANGES AND COMMENTS
			Capacity. Added Event Code 4654, 4655 to Facility Allocation. Added Data Confirmation transaction validations.
3A	21/04/2011	C.Poon	Updated STTM Reports Specifications version to version to 10A. Updated STTM Build Pack version to version 14A. Added Event Code 4811, 4812, 4813 and 4814 to Facility Hub Capacity Process Validations table. Added Event Code 4656, 4657 and 4658 to Facility Allocation Process Validations table. Added Event Code 4906, 4907, 4908, 4909 and 4910 to Data Confirmation Process Validations table.
3B	03/05/2011	C.Poon	Updated STTM Participant Build Pack and STTM Reports Specifications version number.
3C	10/05/2011	C.Poon	Updated STTM Participant Build Pack and STTM Reports Specifications version number.
3D	13/05/2011	C.Poon	Updated STTM Participant Build Pack and STTM Reports Specifications version number.
4	02/06/2011	A.Nambiar	Updated to reflect changes required for the establishment of the Brisbane STTM hub.
	24/06/2011	A.Nambiar	Updated formatting. Replaced missing process validation table for Pipeline CTM Data transaction. Replaced missing validation for error code 4653 for Facility Allocation Process Validation.
4b	01/08/2011	A.Nambiar	Updated the description for error 4641 to more clearly describe the validation.
5	23/09/2011	C.Poon	Updated with amendments outlined in the STTM Interface Protocol Corrigenda Issue 2 dated 10/08/2011 and Issue 3 dated DD/09/2011.
5A	13/02/2012	N.Elhawary/T. Morrow	Added new error code 4911 as part of February2012 patch release to the Data Confirmation Process Validations table Updated descriptive sections to include delayed submission window for FHC & PAD files that was introduced in build 28A
6	6/8/2012	A.Alizzi	QC#168 - Added clarification to Sections 2.7, 2.8, 2.12 and 2.13 regarding workaround for csv file row limit (currently 999). Added note to error codes 4654 and 4655 specifying that they are only applicable to PAD files.
7	14/12/2012	A.Alizzi	Applied changes to MSV transaction introduced by Gas Release 32 (QC#9794). Added disclaimer page to the document.

VERSION	DATE	AUTHOR(S)	CHANGES AND COMMENTS
8	4/10/2013	L. Chasemore	Added MOS Offer transaction (QC9051) Updated error code 4607 wording
	<u>9/10/04/2014</u>	<u>C.Poon</u>	<u>Updated the format of mosperiod for the MOS Offer transaction.</u>
	<u>30/04/2014</u>	<u>C.Poon</u>	<u>QC#4322 - added a note for error code 4659 which will be fixed in Gas Release 35.</u> <u>QC#4086 and QC#4119 - added a note about SWEXIE accepting transactions with additional fields to section 2.1.</u>

Table of Contents

1	INTRODUCTION.....	12
1.1	Purpose.....	12
1.2	Audience.....	12
1.3	Scope.....	12
1.4	Related Documents.....	12
1.5	Definitions, Acronyms and Abbreviations.....	13
1.6	Overview and Structure.....	13
2	TRANSACTION PROCESSING and VALIDATION.....	14
2.1	STTM CSV Transactions.....	14
2.2	Data dictionary.....	16
2.3	Ex Ante Bids and Offers.....	27
2.4	Price Taker Bids.....	32
2.5	Contingency Gas Bids and Offers.....	34
2.6	Facility Hub Capacity.....	39
2.7	Facility Allocation.....	42
2.8	Registered Facility Service Allocation.....	49
2.9	MOS Step Allocation.....	54
2.10	Market Schedule Variation.....	58
2.11	Data Confirmation.....	65
2.12	Deemed STTM Distribution System Allocation.....	69
2.13	Pipeline CTM Data.....	73
2.14	MOS Offers.....	76
1	INTRODUCTION.....	10
1.1	Purpose.....	10
1.2	Audience.....	10
1.3	Scope.....	10
1.4	Related Documents.....	10
1.5	Definitions, Acronyms and Abbreviations.....	11
1.6	Overview and Structure.....	11
2	TRANSACTION PROCESSING and VALIDATION.....	12
2.1	STTM GSV Transactions.....	12
2.2	Data dictionary.....	13
2.3	Ex Ante Bids and Offers.....	24
2.4	Price Taker Bids.....	29
2.5	Contingency Gas Bids and Offers.....	31
2.6	Facility Hub Capacity.....	36
2.7	Facility Allocation.....	39
2.8	Registered Facility Service Allocation.....	46

2.9	<u>MOS Step Allocation</u>	54
2.10	<u>Market Schedule Variation</u>	55
2.11	<u>Data Confirmation</u>	62
2.12	<u>Deemed STTM Distribution System Allocation</u>	66
2.13	<u>Pipeline CTM Data</u>	70
2.14	<u>MOS Offers</u>	73
1	<u>INTRODUCTION</u>	10
1.1	<u>Purpose</u>	10
1.2	<u>Audience</u>	10
1.3	<u>Scope</u>	10
1.4	<u>Related Documents</u>	10
1.5	<u>Definitions, Acronyms and Abbreviations</u>	11
1.6	<u>Overview and Structure</u>	11
2	<u>TRANSACTION PROCESSING and VALIDATION</u>	12
2.1	<u>STTM CSV Transactions</u>	12
2.2	<u>Data dictionary</u>	13
2.3	<u>Ex Ante Bids and Offers</u>	24
2.4	<u>Price Taker Bids</u>	29
2.5	<u>Contingency Gas Bids and Offers</u>	31
2.6	<u>Facility Hub Capacity</u>	36
2.7	<u>Facility Allocation</u>	39
2.8	<u>Registered Facility Service Allocation</u>	46
2.9	<u>MOS Step Allocation</u>	54
2.10	<u>Market Schedule Variation</u>	55
2.11	<u>Data Confirmation</u>	62
2.12	<u>Deemed STTM Distribution System Allocation</u>	66
2.13	<u>Pipeline CTM Data</u>	70
2.14	<u>MOS Offers</u>	73
1	<u>INTRODUCTION</u>	9
1.1	<u>Purpose</u>	9
1.2	<u>Audience</u>	9
1.3	<u>Scope</u>	9
1.4	<u>Related Documents</u>	9
1.5	<u>Definitions, Acronyms and Abbreviations</u>	10
1.6	<u>Overview and Structure</u>	10
2	<u>TRANSACTION PROCESSING and VALIDATION</u>	11
2.1	<u>STTM CSV Transactions</u>	11
2.2	<u>Data dictionary</u>	12
2.3	<u>Ex Ante Bids and Offers</u>	23

<u>2.4</u>	<u>Price Taker Bids</u>	<u>28</u>
<u>2.5</u>	<u>Contingency Gas Bids and Offers</u>	<u>30</u>
<u>2.6</u>	<u>Facility Hub Capacity</u>	<u>35</u>
<u>2.7</u>	<u>Facility Allocation</u>	<u>38</u>
<u>2.8</u>	<u>Registered Facility Service Allocation</u>	<u>45</u>
<u>2.9</u>	<u>MOS Step Allocation</u>	<u>50</u>
<u>2.10</u>	<u>Market Schedule Variation</u>	<u>54</u>
<u>2.11</u>	<u>Data Confirmation</u>	<u>64</u>
<u>2.12</u>	<u>Deemed STTM Distribution System Allocation</u>	<u>65</u>
<u>2.13</u>	<u>Pipeline CTM Data</u>	<u>69</u>
<u>2.14</u>	<u>MOS Offers</u>	<u>72</u>

Table of Figures

Figure 1 - Ex Ante Bid/Offer Interface - Activity Diagram	27
Figure 2 – Price Taker Bid Interface – Activity Diagram	32
Figure 3 – Contingency Gas Bid/Offer Interface – Activity Diagram	34
Figure 4 – Facility Hub Capacity Interface – Activity Diagram	39
Figure 5 – Facility Allocation Interface – Activity Diagram	42
Figure 6 – Registered Facility Service Allocation Interface – Activity Diagram	49
Figure 7 – MOS Step Allocation Interface – Activity Diagram	54
Figure 8 – Market Schedule Variation FTP / HTTP Interface – Activity Diagram	59
Figure 9 - Data Confirmation Interface - Activity Diagram	66
Figure 10 - Deemed STTM Distribution System Allocation – Activity Diagram	69
Figure 11 - Pipeline CTM Data – Activity Diagram	73
Figure 12 – MOS Offer – Activity Diagram	77
Figure 1 - Ex Ante Bid/Offer Interface – Activity Diagram	24
Figure 2 – Price Taker Bid Interface – Activity Diagram	29
Figure 3 – Contingency Gas Bid/Offer Interface – Activity Diagram	31
Figure 4 – Facility Hub Capacity Interface – Activity Diagram	36
Figure 5 – Facility Allocation Interface – Activity Diagram	39
Figure 6 – Registered Facility Service Allocation Interface – Activity Diagram	46
Figure 7 – MOS Step Allocation Interface – Activity Diagram	51
Figure 8 – Market Schedule Variation FTP / HTTP Interface – Activity Diagram	56
Figure 9 – Data Confirmation Interface – Activity Diagram	63
Figure 10 – Deemed STTM Distribution System Allocation – Activity Diagram	66
Figure 11 – Pipeline CTM Data – Activity Diagram	70
Figure 12 – MOS Offer – Activity Diagram	74
Figure 1 – Ex Ante Bid/Offer Interface – Activity Diagram	23
Figure 2 – Price Taker Bid Interface – Activity Diagram	28
Figure 3 – Contingency Gas Bid/Offer Interface – Activity Diagram	30
Figure 4 – Facility Hub Capacity Interface – Activity Diagram	35
Figure 5 – Facility Allocation Interface – Activity Diagram	38
Figure 6 – Registered Facility Service Allocation Interface – Activity Diagram	45
Figure 7 – MOS Step Allocation Interface – Activity Diagram	50
Figure 8 – Market Schedule Variation FTP / HTTP Interface – Activity Diagram	55
Figure 9 – Data Confirmation Interface – Activity Diagram	62
Figure 10 – Deemed STTM Distribution System Allocation – Activity Diagram	65
Figure 11 – Pipeline CTM Data – Activity Diagram	69
Figure 12 – MOS Offer – Activity Diagram	73

Table of Tables

Table 1 – Related Documents	12
Table 2 - Definitions	13
Table 3 - STTM CSV Transactions	14
Table 4 - Field Values	26
Table 5 - Ex Ante Bid Interface Format	28
Table 6 - Ex Ante Offer Interface Format	29
Table 7 – Ex Ante Bid/Offer Transaction Context	29
Table 8 – Ex Ante Bid/Offer Field Validations	30
Table 9 – Ex Ante Bid/Offer Process Validations	31
Table 10 – Price Taker Bid Interface Format	32
Table 11 – Price Taker Bid Transaction Context	32
Table 12 – Price Taker Bid Field Validations	33
Table 13 – Price Taker Bid Process Validations	33
Table 14 – Contingency Gas Bid Interface Format	35
Table 15 – Contingency Gas Offer Interface Format	36
Table 16 – Contingency Gas Bid/Offer Transaction Context	36
Table 17 – Contingency Gas Bid/Offer Field Validations	37
Table 18 – Contingency Gas Bid/Offer Process Validations	38
Table 19 – Facility Hub Capacity Interface Format	39

Table 20 – Facility Hub Capacity Transaction Context.....	40
Table 21 – Facility Hub Capacity Field Validations.....	40
Table 22 – Facility Hub Capacity Process Validations	41
Table 23 – Facility Allocation Interface Format.....	43
Table 24 – Facility Allocation Transaction Context.....	45
Table 25 – Facility Allocation Field Validations.....	46
Table 26 – Facility Allocation Process Validations	48
Table 27 – Registered Facility Service Allocation Interface Format	50
Table 28 – Registered Facility Service Allocation Transaction Context	51
Table 29 - Registered Facility Service Allocation Field Validations	52
Table 30 – Registered Facility Service Allocation Process Validations	53
Table 31 – MOS Step Allocation Interface Format	54
Table 32 – MOS Step Allocation Transaction Context	56
Table 33 – MOS Step Allocation Field Validations	57
Table 34 – MOS Step Allocation Process Validations	57
Table 35 – MSV Scenarios	58
Table 36 – Market Schedule Variation Submission Interface Format.....	60
Table 37 - Market Schedule Variation Submission Transaction Context.....	61
Table 38 - Market Schedule Variation Submission Field Validations	62
Table 39 - Market Schedule Variation Submission Process Validations	63
Table 40 - Market Schedule Variation Confirmation Interface Format.....	64
Table 41 - Market Schedule Variation Confirmation Transaction Context.....	64
Table 42 – Market Schedule Variation Confirmation Field Validations.....	65
Table 43 - Market Schedule Variation Confirmation Process Validations	65
Table 44 - Data Confirmation Interface Format	66
Table 45 - Data Confirmation Transaction Context	66
Table 46 - Data Confirmation Field Validations	67
Table 47 - Data Confirmation Process Validations	68
Table 48 - Deemed STTM Distribution System Allocation format	70
Table 49 – Deemed STTM Distribution System Allocation Transaction Context.....	71
Table 50 – Deemed STTM Distribution System Allocation Field Validations	72
Table 51 – Deemed STTM Distribution System Allocation Process Validations	73
Table 52 - Pipeline CTM Data Format.....	74
Table 53 – Pipeline CTM Data Transaction Context	75
Table 54 – Pipeline CTM Data Field Validations	76
Table 55 – Pipeline CTM Data Process Validations	76
Table 56 – MOS Offer Data Format.....	78
Table 57 – MOS Offer Transaction Context	78
Table 58 – MOS Offer Field Validations	79
Table 59 – MOS Offer Process Validations	80
Table 1 – Related Documents	11
Table 2 – Definitions.....	12
Table 3 – STTM CSV Transactions.....	13
Table 4 – Field Values.....	24
Table 5 – Ex Ante Bid Interface Format	26
Table 6 – Ex Ante Offer Interface Format.....	27
Table 7 – Ex Ante Bid/Offer Transaction Context.....	27
Table 8 – Ex Ante Bid/Offer Field Validations.....	28
Table 9 – Ex Ante Bid/Offer Process Validations	29
Table 10 – Price Taker Bid Interface Format	30
Table 11 – Price Taker Bid Transaction Context.....	30
Table 12 – Price Taker Bid Field Validations.....	31
Table 13 – Price Taker Bid Process Validations.....	31
Table 14 – Contingency Gas Bid Interface Format.....	33
Table 15 – Contingency Gas Offer Interface Format.....	34
Table 16 – Contingency Gas Bid/Offer Transaction Context.....	34
Table 17 – Contingency Gas Bid/Offer Field Validations.....	35
Table 18 – Contingency Gas Bid/Offer Process Validations.....	36
Table 19 – Facility Hub Capacity Interface Format.....	37
Table 20 – Facility Hub Capacity Transaction Context.....	38

Table 21 – Facility Hub Capacity Field Validations	38
Table 22 – Facility Hub Capacity Process Validations	39
Table 23 – Facility Allocation Interface Format	41
Table 24 – Facility Allocation Transaction Context	43
Table 25 – Facility Allocation Field Validations	44
Table 26 – Facility Allocation Process Validations	46
Table 27 – Registered Facility Service Allocation Interface Format	48
Table 28 – Registered Facility Service Allocation Transaction Context	49
Table 29 – Registered Facility Service Allocation Field Validations	50
Table 30 – Registered Facility Service Allocation Process Validations	51
Table 31 – MOS Step Allocation Interface Format	52
Table 32 – MOS Step Allocation Transaction Context	54
Table 33 – MOS Step Allocation Field Validations	55
Table 34 – MOS Step Allocation Process Validations	55
Table 35 – MSV Scenarios	56
Table 36 – Market Schedule Variation Submission Interface Format	58
Table 37 – Market Schedule Variation Submission Transaction Context	59
Table 38 – Market Schedule Variation Submission Field Validations	60
Table 39 – Market Schedule Variation Submission Process Validations	61
Table 40 – Market Schedule Variation Confirmation Interface Format	62
Table 41 – Market Schedule Variation Confirmation Transaction Context	62
Table 42 – Market Schedule Variation Confirmation Field Validations	63
Table 43 – Market Schedule Variation Confirmation Process Validations	63
Table 44 – Data Confirmation Interface Format	64
Table 45 – Data Confirmation Transaction Context	64
Table 46 – Data Confirmation Field Validations	65
Table 47 – Data Confirmation Process Validations	66
Table 48 – Deemed STTM Distribution System Allocation format	68
Table 49 – Deemed STTM Distribution System Allocation Transaction Context	69
Table 50 – Deemed STTM Distribution System Allocation Field Validations	70
Table 51 – Deemed STTM Distribution System Allocation Process Validations	71
Table 52 – Pipeline CTM Data Format	72
Table 53 – Pipeline CTM Data Transaction Context	73
Table 54 – Pipeline CTM Data Field Validations	74
Table 55 – Pipeline CTM Data Process Validations	74
Table 56 – MOS Offer Data Format	76
Table 57 – MOS Offer Transaction Context	76
Table 58 – MOS Offer Field Validations	78
Table 59 – MOS Offer Process Validations	79
Table 1 – Related Documents	9
Table 2 – Definitions	10
Table 3 – STTM CSV Transactions	11
Table 4 – Field Values	22
Table 5 – Ex Ante Bid Interface Format	24
Table 6 – Ex Ante Offer Interface Format	25
Table 7 – Ex Ante Bid/Offer Transaction Context	25
Table 8 – Ex Ante Bid/Offer Field Validations	26
Table 9 – Ex Ante Bid/Offer Process Validations	27
Table 10 – Price Taker Bid Interface Format	28
Table 11 – Price Taker Bid Transaction Context	28
Table 12 – Price Taker Bid Field Validations	29
Table 13 – Price Taker Bid Process Validations	29
Table 14 – Contingency Gas Bid Interface Format	31
Table 15 – Contingency Gas Offer Interface Format	32
Table 16 – Contingency Gas Bid/Offer Transaction Context	32
Table 17 – Contingency Gas Bid/Offer Field Validations	33
Table 18 – Contingency Gas Bid/Offer Process Validations	34
Table 19 – Facility Hub Capacity Interface Format	35
Table 20 – Facility Hub Capacity Transaction Context	36
Table 21 – Facility Hub Capacity Field Validations	36

Table 22 – Facility Hub Capacity Process Validations	37
Table 23 – Facility Allocation Interface Format	39
Table 24 – Facility Allocation Transaction Context	41
Table 25 – Facility Allocation Field Validations	42
Table 26 – Facility Allocation Process Validations	44
Table 27 – Registered Facility Service Allocation Interface Format	46
Table 28 – Registered Facility Service Allocation Transaction Context	47
Table 29 – Registered Facility Service Allocation Field Validations	48
Table 30 – Registered Facility Service Allocation Process Validations	49
Table 31 – MOS Step Allocation Interface Format	50
Table 32 – MOS Step Allocation Transaction Context	52
Table 33 – MOS Step Allocation Field Validations	53
Table 34 – MOS Step Allocation Process Validations	53
Table 35 – MSV Scenarios	54
Table 36 – Market Schedule Variation Submission Interface Format	56
Table 37 – Market Schedule Variation Submission Transaction Context	57
Table 38 – Market Schedule Variation Submission Field Validations	58
Table 39 – Market Schedule Variation Submission Process Validations	59
Table 40 – Market Schedule Variation Confirmation Interface Format	60
Table 41 – Market Schedule Variation Confirmation Transaction Context	60
Table 42 – Market Schedule Variation Confirmation Field Validations	61
Table 43 – Market Schedule Variation Confirmation Process Validations	61
Table 44 – Data Confirmation Interface Format	62
Table 45 – Data Confirmation Transaction Context	62
Table 46 – Data Confirmation Field Validations	63
Table 47 – Data Confirmation Process Validations	64
Table 48 – Deemed STTM Distribution System Allocation format	66
Table 49 – Deemed STTM Distribution System Allocation Transaction Context	67
Table 50 – Deemed STTM Distribution System Allocation Field Validations	68
Table 51 – Deemed STTM Distribution System Allocation Process Validations	69
Table 52 – Pipeline CTM Data Format	70
Table 53 – Pipeline CTM Data Transaction Context	71
Table 54 – Pipeline CTM Data Field Validations	72
Table 55 – Pipeline CTM Data Process Validations	72
Table 56 – MOS Offer Data Format	74
Table 57 – MOS Offer Transaction Context	74
Table 58 – MOS Offer Field Validations	75
Table 59 – MOS Offer Process Validations	76

1 INTRODUCTION

1.1 Purpose

This document is an addendum to the STTM Participant Build Pack and provides further detail regarding the rules of data exchange between AEMO and participants in the context of the Short Term Trading Market (STTM).

1.2 Audience

The primary audience for this document are business users and IT developers of the participants, and AEMO business users and IT developers involved in the design and implementation of STTM.

1.3 Scope

This document describes the data and associated validations that form all of the B2M CSV transactions supported by AEMO STTM systems. This should be read in conjunction with the STTM Participant Build Pack Business Validations Addendum document. Note that it is not within the scope of this document to list and describe all the obligations STTM participants have to provide data to AEMO. The STTM Rules and Procedure remain the definitive source of those obligations. This version covers all approved transaction and changes and is current up to 1 December 2011.

1.4 Related Documents

Ref.	Document Name	Ver.	ShareDocs	Comments
1	STTM Rules	NA		Latest Version
2	STTM Reports Specifications	15	STTMReportsSpecs	
3	STTM Participant Build Pack	19	STTMParticipantBuildPack	
4	STTM Procedures	NA		Latest Version

Table 1 – Related Documents

1.5 Definitions, Acronyms and Abbreviations

Term	Description
AEST	Australian Eastern Standard Time
ASCII	American Standard Code for Information Interchange. A standard coding scheme that assigns numeric values to letters, numbers, punctuation marks, and control characters, to achieve compatibility among different computers and peripherals
CSV	Comma-Separated Values, a comma delimited text
D-1	In reference to a gas day D, the (calendar unless otherwise specified) day before that gas day.
D+1	In reference to a gas day D, the (calendar unless otherwise specified) day after that gas day.
GJ	1000 Mega Joules, 10 ⁹ Joules, Joule is a unit of energy
M	Mandatory, in the context of this document, indicates that the field's value must be provided
MIS	Market Information System
MOS	Market Operator Service
TRN	Trading Right Number
CRN	Contract Registration Number (Identifies Registered Facility or Distribution Services)
NR	Not required, in the context of this document, indicates that the value will be ignored by the parsing application even if it is provided
O	Optional, in the context of this document, indicates that a field's value need not be provided, but will be processed if provided
SIP	STTM Interface Protocol
STTM	Short Term Trading Market
UML	Unified Modelling Language
S-WEX	This is the STTM – Web Exchanger, an AEMO application that allows STTM Participants to submit information to AEMO interactively.
S-WEXIE	This is the STTM Web Exchanger Interface Engine application that allows STTM Participants to submit information to AEMO via CSV files.
FTP	File Transfer Protocol (FTP) is a standard network protocol used to exchange and manipulate files over an Internet Protocol computer network, such as the Internet
HTTP	Hyper Text Transfer Protocol -The internet protocol used for information exchange between web clients and web servers.

Table 2 - Definitions

1.6 Overview and Structure

This document comprises the following sections:

- Introduction – outlines the purpose of this Participant Build Pack addendum, the intended audience, and scope.
- Transactions – contains the general requirements and external interface specifications for the Short Term Trading Market.

2 TRANSACTION PROCESSING and VALIDATION

2.1 STTM CSV Transactions

ID	Transaction	Submitter	Recipient	File Type	STTM Rules Section Reference ¹
1	Ex Ante Bids and Offers	STTM Shipper or STTM User	AEMO	BID, OFR	406, 407, 408, 410
2	Price Taker Bids	STTM User	AEMO	PTW	409, 410
3	Contingency Gas Bids and Offers	STTM Shipper or STTM User	AEMO	CGB, CGO	435, 436
4	Facility Hub Capacity	STTM Facility Operator	AEMO	FHC	414
5	Facility Allocation	Facility Allocation Agent	AEMO	PAD, PAU, PAP, PAF, PAR	419
6	Registered Service Allocation	Registered Service Allocation Agent	AEMO	TPD, TPU, TPP, TPF, TPR	420
7	MOS Step Allocation	Facility Operator	AEMO	MSD, MSU, MSP, MSF, MSR	419, 421
8	Market Schedule Variation	STTM Shipper or STTM User	AEMO	MSV, MVC	423
9	Data Confirmation	Facility Operator	AEMO	CFM	
10	Deemed STTM Distribution System Allocation	Facility Operator	AEMO	NAD, NAU, NAP, NAF, NAR	STTM Procedures Section 7.2.7
11	Pipeline CTM Data	Facility Operator	AEMO	CTD, CTU, CTP, CTF, CTR	STTM Procedures Section 7.2.6
12	MOS Offers	STTM Shipper (MOS Provider)	AEMO	MOS	400

Table 3 - STTM CSV Transactions

Note: SWEXIE will accept transactions that contain more fields than the number of fields specified in the transaction definition for the transaction type submitted, without generating an error message. However any additional fields beyond those specified in the transaction definition will be ignored and not saved to the database. Note that SWEXIE will reject a transaction if the number of header fields does not match the number and order specified in the transaction definition.

¹ Referenced to the STTM Rules and Procedures as applicable on 1 December 2011

For example, in the following Price Taker Bid transaction SWEXIE would accept the transaction and automatically save the first three values only. The additional 'quantity' field would be ignored:

gasdate,trn,quantity,quantity

2009-02-12,ABCD123456,10000,20000

In the following example, the Price Taker Bid transaction would be rejected due to the missing data for the additional 'quantity' field:

gasdate,trn,quantity,quantity

2009-02-12,ABCD123456,10000

2.2 Data dictionary

Field Name	Data Type	Description		Relevant File Type Descriptor
allocationquantity	numeric(18,9)	The flow quantity for the facility expressed in GJ		PAD,PAU, PAF, PAP, PAR, TPD, TPU, TPF, TPP, TPR
commencementdate	datetime	Value	Description	BID, OFR, CGB, CGO
		YYYY-MM-DD	Gas day date when the record takes effect. Any time component supplied will be ignored and this date is inclusive. Example: 2009-02-24 2008-12-01	
comments	varchar(255)	Comments associated with the Contingency Gas bid or offer.		CGB, CGO
consumedenergygj	numeric(18,9)	The metered energy quantity for the CTM.		CTD, CTU, CTP, CTF, CTR

counterpartyfacilityid	varchar(10)	The Facility (or hub) Identifier for the Counter-party to the MSV:		MSV, MVC
		<ul style="list-style-type: none"> • SEAGAS (South East Australia Gas pipeline) • MSP (Moomba to Sydney pipeline) • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • RBP (Roma to Brisbane Pipeline) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility) 		
counterpartyid	int	Trading Participant unique counterparty identifier		MSV, MVC
counterpartytype	char(3)	Value	Description	MSV, MVC
		STH	STTM Shipper to hub	
		SFH	STTM Shipper from the hub	
		NAH	STTM User at the hub	
crn	varchar(20)	Unique Identifier for Registered Facility or Distribution Service. The format of the CRN is given by: XXHYYYYYY where : XX = 'RS' for Registered Service H = Hub Id (1=SYD, 2 = ADL, 3=BRI) YYYYYY = unique identifier for the Registered Service.		PAD, PAU, PAF, PAP, PAR
directioncode	char(1)	Value	Description	CGB, CGO

		T	Registered Facility Service to the hub	
		F	Registered Facility Service from the hub	
		A	Registered Distribution Service at the hub	
duplicatestatus	varchar(5)	Value	Description	ACK, MCK
		Yes	If the transaction id is duplicated	
		No	If the transaction id is not duplicated	
eventcode	int	Event code is a numeric value representing the error. Example: 91		ACK, MCK
eventcodedescription	varchar(256)	Event code description describes the event code in question. Example: Gas quantities must not have decimal places		ACK, MCK
eventcontext	varchar(256)	Event context is an optional value giving more information about the Event.		ACK, MCK
eventseverity	varchar(15)	Value	Description	ACK, MCK
		Information	If the error level is acceptable	
		Warning	If the error needs further attention	
		Error	The transaction is in Error and hence cannot be processed	
facilityallocationidentifier	Varchar(30)	Where applicable, this unique identifier identifies the facility allocation data file used in preparing the registered facility service allocation data submitted by an allocation agent.		TPD, TPU, TPF, TPP, TPR
facilityhubcapacity	int	STTM Capacity of the Facility expressed in GJ		FHC

facilityid	varchar(10)	<p>The current list of Facility IDs are:</p> <p>'MSP' – Moomba to Sydney pipeline</p> <p>'EGP' – Eastern Gas Pipeline (EGP) pipeline to Sydney</p> <p>'MAP' – Moomba to Adelaide pipeline</p> <p>'SEAGAS' – South East Aust. Gas pipeline to Adelaide</p> <p>'ROS' – Rosalind Park production facility</p> <p>'NETSYD1' – Distribution service at the Sydney Hub</p> <p>'NETADL1' – Distribution service at the Adelaide Hub</p> <p>'NETBRI1' – Brisbane Hub Facility</p> <p>'NETXBRI2' – South East Queensland Distribution System</p> <p>'NETXBRI3' – Brisbane North and Ipswich Distribution System</p> <p>'NETYBRI4' Swanbank Facility – Deemed Distribution System</p> <p>'NETYBRI5' Gibson Island Facility – Deemed Distribution System</p> <p>'NETYBRI6' Lytton Facility – Deemed Distribution System</p> <p>Note: 'NETBRI1' – Brisbane – Network 1 must not be used for the submission of Contingency Gas Bids and Offers.</p>		FHC, CGB, CGO, PAD, PAU, PAF, PAP, PAR, TPD, TPU, TPF, TPP, TPR, MOS															
filetypedescriptor	char(3)	<table border="1"> <thead> <tr> <th data-bbox="869 1317 1075 1357"><i>Value</i></th> <th data-bbox="1075 1317 1299 1357"><i>Description</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="869 1357 1075 1435">BID</td> <td data-bbox="1075 1357 1299 1435">Ex Ante Bid data</td> </tr> <tr> <td data-bbox="869 1435 1075 1514">OFR</td> <td data-bbox="1075 1435 1299 1514">Ex Ante Offer data</td> </tr> <tr> <td data-bbox="869 1514 1075 1592">CGB</td> <td data-bbox="1075 1514 1299 1592">Contingency Bids</td> </tr> <tr> <td data-bbox="869 1592 1075 1671">CGO</td> <td data-bbox="1075 1592 1299 1671">Contingency Offer</td> </tr> <tr> <td data-bbox="869 1671 1075 1749">PTW</td> <td data-bbox="1075 1671 1299 1749">Price Taker Bid data</td> </tr> <tr> <td data-bbox="869 1749 1075 1827">FHC</td> <td data-bbox="1075 1749 1299 1827">Facility Hub Capacity data</td> </tr> <tr> <td data-bbox="869 1827 1075 1877">MOS</td> <td data-bbox="1075 1827 1299 1877">MOS Offer</td> </tr> </tbody> </table>	<i>Value</i>	<i>Description</i>	BID	Ex Ante Bid data	OFR	Ex Ante Offer data	CGB	Contingency Bids	CGO	Contingency Offer	PTW	Price Taker Bid data	FHC	Facility Hub Capacity data	MOS	MOS Offer	<p>This will be used to identify the transaction type.</p>
		<i>Value</i>	<i>Description</i>																
		BID	Ex Ante Bid data																
		OFR	Ex Ante Offer data																
		CGB	Contingency Bids																
		CGO	Contingency Offer																
		PTW	Price Taker Bid data																
		FHC	Facility Hub Capacity data																
MOS	MOS Offer																		

		MSV	Market Schedule Variation Submission data
		MVC	Market Schedule Variation Confirmation data
		PAD	Facility Allocation data (Daily)
		PAU	Facility Allocation data (Update)
		PAF	Facility Allocation data (Final)
		PAP	Facility Allocation data (Preliminary)
		PAR	Facility Allocation data (Revision)
		MCK	Message Acknowledgement
		ACK	Transaction Acknowledgement
		MSD	MOS Step Allocation data (Daily)
		MSU	MOS Step Allocation data (Update)
		MSF	MOS Step Allocation data (Final)
		MSP	MOS Step Allocation data (Preliminary)
		MSR	MOS Step Allocation data (Revision)
		NAD	Deemed STTM Distribution System Allocation (Daily)

		NAU	Deemed STTM Distribution System Allocation (Update)
		NAP	Deemed STTM Distribution System Allocation (Preliminary)
		NAF	Deemed STTM Distribution System Allocation (Final)
		NAR	Deemed STTM Distribution System Allocation (Revision)
		CTD	Pipeline CTM Data (Daily)
		CTU	Pipeline CTM Data (Update)
		CTP	Pipeline CTM Data (Preliminary)
		CTF	Pipeline CTM Data (Final)
		CTR	Pipeline CTM Data (Revision)
		TPD	Registered Facility Service Allocation data (Daily)
		TPU	Registered Facility Service Allocation data (Update)
		TPF	Registered Facility Service Allocation data (Final)
		TPP	Registered Facility Service Allocation data (Preliminary)
		TPR	Registered Facility Service Allocation data (Revision)

		CFM	Data Confirmation	
gasdate	datetime	Value	Description	FHC, PAD, PAU, PAF, PAP, PAR, TPD, TPU, TPF, TPP, TPR, MSD, MSU, MSF, MSP, MSR, MSV, MVC, NAD, NAU, NAP, NAF, NAR, CTD, CTU, CTP, CTF, CTR
		YYYY-MM-DD	Gas day date that the data is relevant to. Example: 2009-02-24 2008-12-01	
initiatingmessageid	varchar(30)	The message id supplied by the Market Participant for the transaction. Example: ABCD-1234		ACK, MCK, CFM
marketcode	char(4)	Value	Description	All
		STTM	Short Term Trading Market	
mirn	varchar(10)	Meter Installation Registration Number		CTD, CTU, CTP, CTF, CTR
mosperiod	varchar(8)	The monthly MOS period e.g. Jun UN -2014		MOS
mosquantity	numeric(18,9)	Market Operator Service Quantity expressed in GJ.		PAD, PAU, PAF, PAP, PAR
mosstepallocationquantity	numeric(18,9)	Market Operator Service step Allocation Quantity expressed in GJ.		MSD, MSU, MSF, MSP, MSR
mosstackid	int	Market Operator Service stack Identifier.		MSD, MSU, MSF, MSP, MSR
mosstepid	int	Market Operator Service step Identifier		MSD, MSU, MSF, MSP, MSR
mostype	char(1)	Value	Description	MOS
		I	Increase MOS offer	
		D	Decrease MOS offer	
mvsquantity	numeric(18,9)	Market Schedule Variation Quantity expressed in GJ		MSV, MVC

msvid	int	The AEMO identifier for a submitted Market Schedule Variation		MVC
msvstatus	char(10)	This is the status used in MSV confirmation transactions. A valid MSV confirmation transaction will set the status of the target MSV based on this field. Valid values are 'REJECT' and 'CONFIRM'		MVC
msvtype	char(1)	Value	Description	MSV, MVC
		I	Increase the submitter's modified market schedule	
		D	Decrease the submitter's modified market schedule	
networkidentifier	varchar(20)	Deemed STTM Distribution System (Network) Identifier		NAD, NAU, NAP, NAF, NAR
participantidentifier	varchar(20)	STTM Participant Identifier		NAD, NAU, NAP, NAF, NAR
qualityid	int	Quality identifier for CTM data: 205 : Normal – Actual Read - PO 206 : Estimated - PO 207 : Substituted - PO		CTD, CTU, CTP, CTF, CTR
quantity	numeric(18,9)	The distribution system (hub) flow quantity expressed in MJ. Example: 2.200000000 4.560000000		NAD, NAU, NAP, NAF, NAR
quantity	int	The flow quantity expressed in GJ. Example: 20000 30000		PTW

receiptdatetime	datetime	Receipt Date is the date time when the acknowledgement is created. Example: 2009-02-15T06:47:05		ACK, MCK
receiptid	varchar(30)	Receipt Id is the Acknowledgement Id given by Market Operator for the transaction initiated. Example: AEMO-ACK-1234		ACK, MCK
status	varchar(10)	Value	Description	ACK, MCK
		Accept	If the validation passes	
		Reject	If the validation fails	
stepxxprice	numeric(15,4)	Step price in AUD corresponding to the Bid/Offer Step. 'xx' is the step number from 1 to 10. Example: 5.0000 3.5000		BID, OFR, CGB, CGO, MOS
stepxxquantity	int	Step quantity expressed in GJ corresponding to the Bid/Offer Step. 'xx' is the step number from 1 to 10.		BID, OFR, CGB, CGO, MOS
stepxxtrn	varchar(20)	Step Trading Right Number corresponding to the Offer Step (Refer trn in data dictionary). 'xx' is the step number from 1 to 10.		MOS
submitterid	int	Id of the party submitting Market Schedule Variation		MSV, MVC
submittertype	char(3)	Value	Description	MSV, MVC
		STH	Shipper to the hub	
		SFH	Shipper from the hub	
		NAH	STTM User at the hub	
submitterfacilityid	varchar(10)	The Facility Identifier for the Submitter <ul style="list-style-type: none"> SEAGAS (South East Australia Gas pipeline) MSP (Moomba to Sydney) 		MSV, MVC

		pipeline) <ul style="list-style-type: none"> • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • RBP (Roma to Brisbane Pipeline) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility) 		
terminationdate	datetime	Value	Description	BID, OFR, CGB, CGO
		YYYY-MM-DD	Gas day date when the record ceases to take effect and this date is inclusive. Example: 2009-02-24 2008-12-01	
trn	varchar(20)	Trading Right Number in the format – XXHYYYYYYZZZ where : XX= 'TR' for Trading Right H = Hub Id (1=SYD, 2 = ADL, 3=BRI) YYYYYY = numeric unique identifier for Registered Service. ZZZ = numeric unique identifier for a Trading Right associated to a Registered Service E.g. for a registered service with CRN = RS1000001 for Hub 1, possible TRNs may be: TR1000001001 = 1 st TRN for CRN RS1000001 TR1000001002 = 2 nd TRN for CRN RS1000001 TR1000001003 = 3 rd TRN for		PTW, TPD, TPF, TPP, TPU, TPR

		CRN RS1000001	
ucmosquantity	numeric(18,9)	Overrun Market Operator Service Quantity expressed in GJ.	PAD, PAU, PAF, PAP, PAR

2.3 Ex Ante Bids and Offers

A Trading Participant may submit Ex Ante (applies to D-1, D-2 and D-3 schedules) Bids and Offers to AEMO via a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

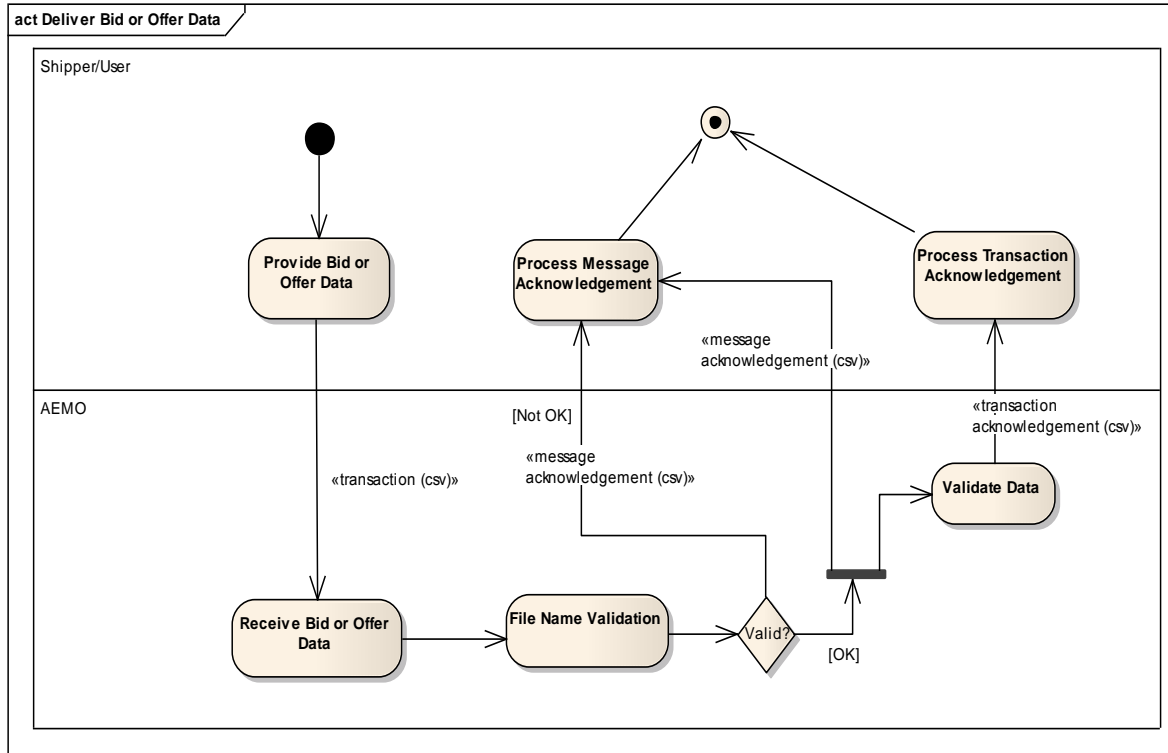


Figure 1 - Ex Ante Bid/Offer Interface - Activity Diagram

Field name	M/O/NR	Description
commencementdate	M	Start gas date from which the bid or offer will apply, e.g. 2009-02-12. Can be sourced from INT706
terminationdate	M	End gas date up to and including which the bid or offer will apply, e.g. 2009-02-15 Can be sourced from INT706
trn	M	Trading Right Number in the format – XXHYYYYYYZZZ. Can be sourced from INT706
step01price	M	1 st bid step price
step01quantity	M	1 st bid step quantity
step02price	O	2 nd bid step price
step02quantity	O	2 nd bid step quantity
step03price	O	3 rd bid step price
step03quantity	O	3 rd bid step quantity
step04price	O	4 th bid step price
step04quantity	O	4 th bid step quantity
step05price	O	5 th bid step price

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
step05quantity	O	5 th bid step quantity
step06price	O	6 th bid step price
step06quantity	O	6 th bid step quantity
step07price	O	7 th bid step price
step07quantity	O	7 th bid step quantity
step08price	O	8 th bid step price
step08quantity	O	8 th bid step quantity
step09price	O	9 th bid step price.
step09quantity	O	9 th bid step quantity
step10price	O	10 th bid step price.
step10quantity	O	10 th bid step quantity

Table 5 - Ex Ante Bid Interface Format

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
commencementdate	M	Start gas date from which the bid or offer will apply, e.g. 2009-02-12
terminationdate	M	End gas date up to and including which the bid or offer will apply, e.g. 2009-02-15
trn	M	Trading Right Number in the format – XXHYYYYYYZZZ Can be sourced from INT706
step01price	M	1 st offer step price
step01quantity	M	1 st offer step quantity
step02price	O	2 nd offer step price
step02quantity	O	2 nd offer step quantity
step03price	O	3 rd offer step price
step03quantity	O	3 rd offer step quantity
step04price	O	4 th offer step price
step04quantity	O	4 th offer step quantity
step05price	O	5 th offer step price
step05quantity	O	5 th offer step quantity
step06price	O	6 th offer step price
step06quantity	O	6 th offer step quantity
step07price	O	7 th offer step price
step07quantity	O	7 th offer step quantity
step08price	O	8 th offer step price
step08quantity	O	8 th offer step quantity
step09price	O	9 th offer step price.

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
step09quantity	O	9 th offer step quantity
step10price	O	10 th offer step price.
step10quantity	O	10 th offer step quantity

Table 6 - Ex Ante Offer Interface Format

Trigger	This transaction is initiated by a Trading Participant when they intend to bid or offer gas in the STTM.
STTM Rules Section Reference	406, 407, 408, 410
Pre-condition	The Trading Participant must hold a valid Trading Right for the days for which the bid or offer is submitted and must have decided the cumulative quantities and prices at which the gas is to be offered or bid.
Post-condition	The Trading Participant's submitted bid or offer is validated and stored in the STTM systems for use in scheduling.

Table 7 – Ex Ante Bid/Offer Transaction Context

Field	Validation Name	Event Code	Description
commencementdate	Date range validation.	4004	Commencement date must be less than or equal to the termination date of the record.
commencementdate	Schedule cut off validation.	4204, 4205 & 4304, 4305 for bid and offer respectively.	The transaction must be submitted by no later than Gas Day Start + 5:30 Hours on the gas date before the Commencement date.
trn	Trading Right Validation	4201 & 4301 for bid and offer respectively.	The Trading Right Number must be that of a Trading Right in the STTM Systems and must be cover ALL of the days covered by the commencement and termination dates (inclusive).

Field	Validation Name	Event Code	Description
step(n)price	Step Price Validation	4213, 4215, 4212 & 4313,4314,4312 for bid and offer respectively.	<p>Prices (\$/GJ) may be entered up to a maximum of four decimal places.</p> <p>Price must be \geq Minimum Market Price and \leq Market Price Cap.</p> <p>Price must increase with increasing offer quantity.</p> <p>Price must decrease with increasing bid quantity.</p>
step(n)quantity	Step Quantity Validation	4209, 4210, 4211 & 4309, 4310, 4311 for bid and offer respectively.	<p>Step Quantity must be greater than or equal to 0.</p> <p>Step Quantity must not have any decimal places.</p> <p>Step Quantity associated with step n must be greater than the quantity associated with step n-1</p> <p>Cumulative offer quantity must not exceed the Trading Right Capacity of the nominated Trading Right (referred to by the TRN in the submission).</p> <p>Cumulative bid quantity must not exceed the Trading Right Capacity of the nominated Trading Right (referred to by the TRN in the submission) less the Price Taker Bid quantity for that TRN for that gas day already submitted.</p>

Table 8 – Ex Ante Bid/Offer Field Validations

Validation	Event Code	Description
Minimum number of Price Quantity Steps	4207, 4307 for bid and offer respectively	The first Price\Quantity step must have non-null values.
Contiguous Steps	4208, 4308 for bid and offer respectively	Step Price\Quantity values must be contiguous

Validation	Event Code	Description
Bidding by suspended STTM Users	4216	If an ex ante bid is submitted with a selected Trading Right that is associated with a Registered Distribution Service AND if the submitting Trading Participant is suspended in the role of 'STTM User' at the associated hub for one or more gas days of the bid, the system will reject the entire ex ante bid.
Bidding by suspended STTM Shippers	4217	If an ex ante bid is submitted with a selected Trading Right that is associated with a Registered Facility Service AND if the submitting Trading Participant is suspended in the role of 'STTM Shipper' at the associated hub for one or more gas days of the bid, the system will reject the entire ex ante bid.
Single record per file	4008	Only one Ex Ante Bid or Offer is allowed per file.

Table 9 – Ex Ante Bid/Offer Process Validations

2.4 Price Taker Bids

A Trading Participant may submit Price Taker Bids to AEMO via a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

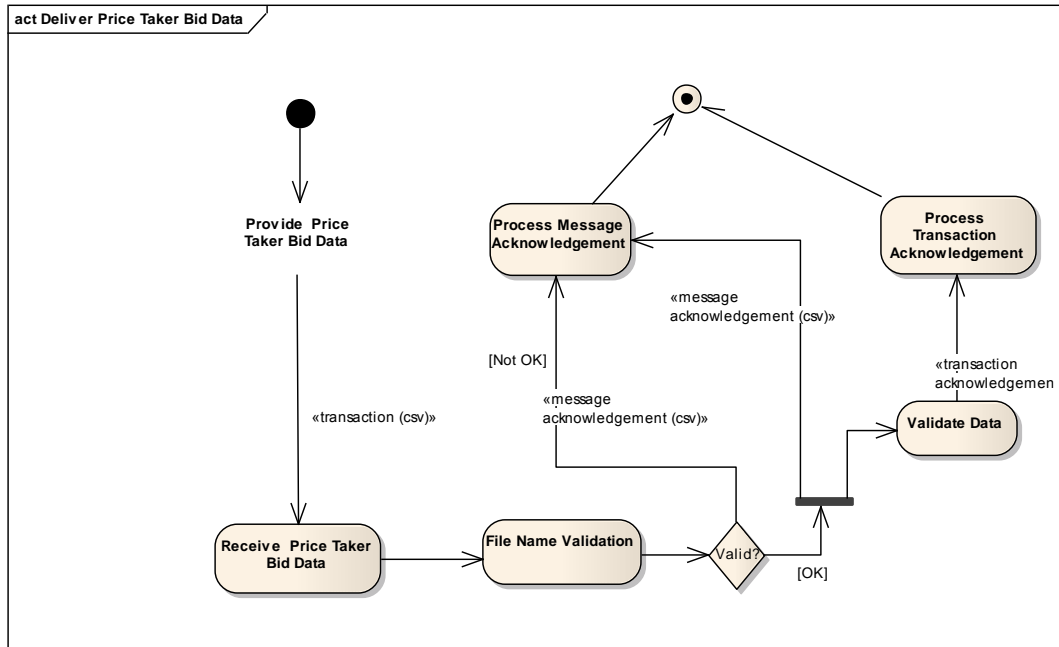


Figure 2 – Price Taker Bid Interface – Activity Diagram

Field name	M/O/NR	Description
gasdate	M	Gas date for which the price taker bid will apply
trn	M	Trading Right Number in the format – XXHYYYYYZZZ
quantity	M	Amount of gas requested for the gas date at the hub market price

Table 10 – Price Taker Bid Interface Format

Trigger	This transaction is initiated by a Trading Participant when they intend to bid for gas at the hub market price in the STTM.
STTM Rules Section Reference	409
Pre-condition	The Trading Participant must hold a valid Trading Right for the days for which the price taker bid is submitted and must have decided the quantity of gas required.
Post-condition	The Trading Participant’s submitted price taker bid is validated and stored in the STTM systems for use in scheduling.

Table 11 – Price Taker Bid Transaction Context

Field	Validation Name	Event Code	Description
gasdate	Gas Date Validation	4404, 4405	The transaction must be submitted by no later than Gas Day Start + 5:30 Hours on the gas date before the Price Taker Bid gas date.
trn	Trading Right Validation	4402, 4406	The Trading Right Number (TRN) must be that of a valid Trading Right in the STTM Systems and must be valid for the gas date
quantity	Step Quantity Validation	4407	Quantity must be greater than or equal to 0. Quantity must not have any decimal places.
quantity	Step Quantity Trading Right Capacity Validation	4408	Quantity must not exceed the Trading Right Capacity of the nominated Trading Right (referred to by the TRN in the submission) LESS the maximum step quantity for the most recently submitted ex ante bid for the same gas day and Trading Right.

Table 12 – Price Taker Bid Field Validations

Validation	Event Code	Description
Single record per file	4008	Only one Price Taker Bid is allowed per file.

Table 13 – Price Taker Bid Process Validations

2.5 Contingency Gas Bids and Offers

A Trading Participant may submit Contingency Gas (applies to d-1, d-2 and d-3) Bids and Offers to AEMO via a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

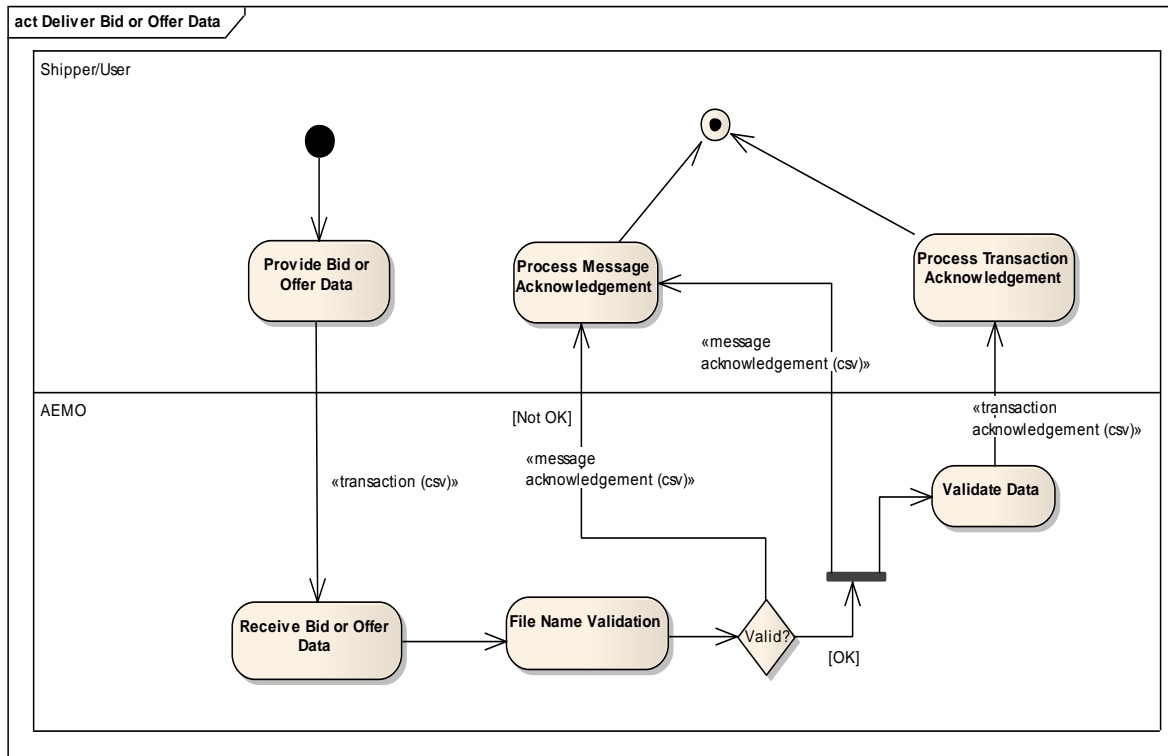


Figure 3 – Contingency Gas Bid/Offer Interface – Activity Diagram

Field name	M/O/NR	Description
commencementdate	M	Start gas date from which the CG bid will apply.
terminationdate	M	End gas date up to and including which the CG bid will apply.
facilityid	M	Facility identifier for which the CG bid will apply
directioncode	M	describes the flow direction of the CG bid (to the hub, from the hub, at the hub)
comments	O	Optional comments relating to the contingency gas bid/offer
step01price	M	1 st bid step price
step01quantity	M	1 st bid step quantity
step02price	O	2 nd bid step price
step02quantity	O	2 nd bid step quantity
step03price	O	3 rd bid step price

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
step03quantity	O	3 rd bid step quantity
step04price	O	4 th bid step price
step04quantity	O	4 th bid step quantity
step05price	O	5 th bid step price
step05quantity	O	5 th bid step quantity
step06price	O	6 th bid step price
step06quantity	O	6 th bid step quantity
step07price	O	7 th bid step price
step07quantity	O	7 th bid step quantity
step08price	O	8 th bid step price
step08quantity	O	8 th bid step quantity
step09price	O	9 th bid step price.
step09quantity	O	9 th bid step quantity
step10price	O	10 th bid step price.
step10quantity	O	10 th bid step quantity

Table 14 – Contingency Gas Bid Interface Format

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
commencementdate	M	Start date from which the CG offer will apply.
terminationdate	M	End date up to which the CG offer will apply.
facilityid	M	Facility identifier for which the CG offer will apply
directioncode	M	Describes the flow direction of the CG offer (to the hub, from the hub, at the hub)
comments	O	Optional comments relating to the contingency gas offer
step01price	M	1 st offer step price
step01quantity	M	1 st offer step quantity
step02price	O	2 nd offer step price
step02quantity	O	2 nd offer step quantity
step03price	O	3 rd offer step price
step03quantity	O	3 rd offer step quantity
step04price	O	4 th offer step price
step04quantity	O	4 th offer step quantity
step05price	O	5 th offer step price
step05quantity	O	5 th offer step quantity
step06price	O	6 th offer step price

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
step06quantity	O	6 th offer step quantity
step07price	O	7 th offer step price
step07quantity	O	7 th offer step quantity
step08price	O	8 th offer step price
step08quantity	O	8 th offer step quantity
step09price	O	9 th offer step price.
step09quantity	O	9 th offer step quantity
step10price	O	10 th offer step price.
step10quantity	O	10 th offer step quantity

Table 15 – Contingency Gas Offer Interface Format

Trigger	This transaction is initiated by a Trading Participant, who is a STTM Shipper or User, when they intend to bid or offer for contingency gas in the STTM.
STTM Rules Section Reference	435,436
Pre-condition	A valid STTM Shipper or User on the days for which the contingency gas bid or offer is submitted must have decided the quantity of contingency gas they intend to offer or bid into the STTM.
Post-condition	The STTM Participant's submitted Contingency Gas bid or offer is validated and stored in the STTM systems for use in Contingency Gas scheduling and settlements.

Table 16 – Contingency Gas Bid/Offer Transaction Context

Field	Validation Name	Event Code	Description
commencementdate	Date range validation.	4004	Commencement date must be less than or equal to the termination date of the record.
commencementdate	Schedule cut off validation.	4702, 4703	The transaction must be submitted by no later than 6pm EST on the gas date before the Commencement date.
facilityid	Facility validation	4700	Contingency Gas Bids and Offers must be submitted against valid facilities. Contingency Gas Bids and Offers intended to be applied at the hub must be submitted against a specific STTM

Field	Validation Name	Event Code	Description
			<p>distribution system/deemed STTM distribution system when the hub is comprised of multiple STTM distribution systems/deemed STTM distribution systems.</p> <p>'NETBRI1' must not be used for the submission of Contingency Gas Bids and Offers.</p>
step(n)price	Step Price Validation	4713,4714,4715,4716	<p>CG Prices (\$/GJ) may be entered up to a maximum of four decimal places.</p> <p>CG Price must be \geq Minimum Market Price and \leq Market Price Cap.</p> <p>CG Price must decrease with increasing bid quantity.</p> <p>CG Price must increase with increasing offer quantity.</p>
step(n) quantity	Step Quantity Validation	4708, 4709, 4711	<p>Step Quantity must be greater than or equal to 0.</p> <p>Step Quantity must not have any decimal places.</p> <p>Step Quantity associated with step n must be greater than the quantity associated with step n-1</p>

Table 17 – Contingency Gas Bid/Offer Field Validations

Validation	Event Code	Description
Flow Direction validation	4704	The Contingency Gas Bid/Offer must be associated with a valid directioncode.
Price\Quantity validation	4706	The first Price\Quantity step must have non-null values.
Contiguous Steps	4707	Step Price\Quantity values must be contiguous.
Suspended STTM User or Shipper	4717, 4718	<p>A Trading Participant who is suspended at a hub in the role of STTM User must not bid for Contingency Gas as an STTM User withdrawing gas at that Hub.</p> <p>A Trading Participant who is suspended at a hub in the role of</p>

Validation	Event Code	Description
		STTM Shipper must not bid for Contingency Gas on an STTM Facility shipping gas to or from the that Hub.
Single record per file	4008	Only one CG bid or offer is allowed per file.

Table 18 – Contingency Gas Bid/Offer Process Validations

2.6 Facility Hub Capacity

The STTM Facility Operator must provide Facility Hub Capacity Data to AEMO by the provisional and ex ante cut-off times as set out in the NGR and the STTM procedures. AEMO will send the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the STTM Facility Operator.

If the Facility Hub Capacity data fails the validation test, a rejection notice is issued, and the facility operator must resubmit.

If a submission is outside of the high and low validation levels but greater than or equal to zero and less than or equal to the maximum hub capacity the submission can be confirmed by the STTM facility operator (see section 2.11 Data Confirmation). If a submission has not been received by the ex ante cut-off or a submission has not been confirmed by this time, then the submission window is extended for a maximum of one-and-a-half hours or until a valid submission is received or a submission is confirmed.

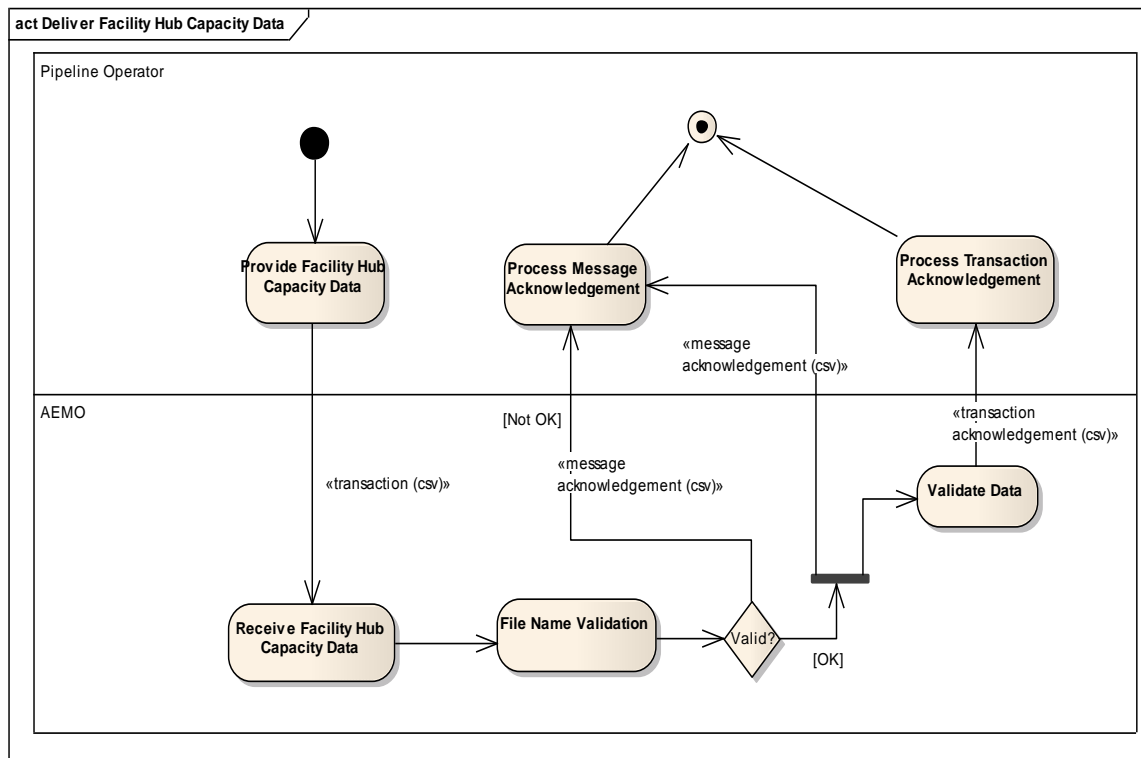


Figure 4 – Facility Hub Capacity Interface – Activity Diagram

Field name	M/O/NR	Description
facilityid	M	Facility identifier for which the facility hub capacity will apply
gasdate	M	Gas date for which the facility hub capacity will apply
facilityhubcapacity	M	Facility hub capacity for the gas date for the STTM facility

Table 19 – Facility Hub Capacity Interface Format

Trigger	This transaction is initiated by a Pipeline Operator to enter the facility hub capacity of each STTM facility (pipeline or storage or production facility) on each hub for the required gas date.
STTM Rules Section Reference	414
Pre-condition	The Participant must be the Facility Operator for the STTM facility
Post-condition	The Pipeline Operator 's submitted facility hub capacity is validated and stored in the STTM systems for use in scheduling.

Table 20 – Facility Hub Capacity Transaction Context

Field	Validation Name	Event Code	Description
facilityid	Facility Id Validation	4805	The FacilityId must match the FacilityID of an STTM facility that is active for the gas date.
gasdate	Gas Date Validation	4801,4807	Facility Hub Capacity Submission date time must not be later than Gas day Start + 4:30 Hours EST on the day preceding the gas date.
facilityhubcapacity	Facility Hub Capacity Validation	4802,4803,4808,4809,4810	Capacity must be greater than or equal to 0. Capacity must be <= maximum capacity of the STTM facility. Capacity must not have any decimal places. Capacity exceeds the high capacity threshold of the Facility. Capacity is lower than the low capacity threshold of the Facility. (Note: the high and low capacity thresholds are set by the facility operator.)

Table 21 – Facility Hub Capacity Field Validations

Validation	Event Code	Description
Company Submitter Validation	4804	The facility operator submitting the capacity data must have registered their details with AEMO for the gas days for which capacity data is submitted by the company.
Company Submitter Validation	4806	The organisation submitting the transaction must be the STTM Facility Operator for the Facility Id.
Capacity D-1 schedule submission validation	4811	New capacity data for the D-1 schedule cannot be submitted between the first and second cutoff time if there is a valid capacity data for the D-1 schedule for the same gas day.
Capacity D-1 schedule submission validation	4812	New capacity data for the D-1 schedule cannot be submitted between the first and second cut off time if there is a confirmed capacity data for the D-1 schedule for the same gas day.
One facility per file	4813	Only one facility is allowed per file.

Table 22 – Facility Hub Capacity Process Validations

2.7 Facility Allocation

Facility Operators must submit STTM facility allocation data to AEMO for gas day D on D+1 daily by the cut off time specified in the rules. A facility operator must nominate an allocation agent to submit data on its behalf or it can act as its own allocation agent. AEMO will accept allocation data in CSV files from the nominated allocation agent.

If the facility allocation submission is outside of the upper and lower warning threshold the submission can be confirmed by the STTM facility operator (see section 2.11 Data Confirmation). If a facility allocation and matching MOS step allocation have not been received by the ex post cut-off or a submission has not been confirmed by this time, then the submission window is extended for a maximum of four hours or until a valid submission is received or a submission is confirmed.

Where a valid facility allocation and MOS step allocation has not been received by the ex post cut off time, AEMO will perform the default allocation in accordance with the rules and procedures. If a default allocation has been processed for a facility then the relevant allocation agent must submit a new facility allocation and MOS step allocation.

The allocation agent must submit Preliminary, Final and Revision Facility allocations to AEMO for market settlement for each billing period.

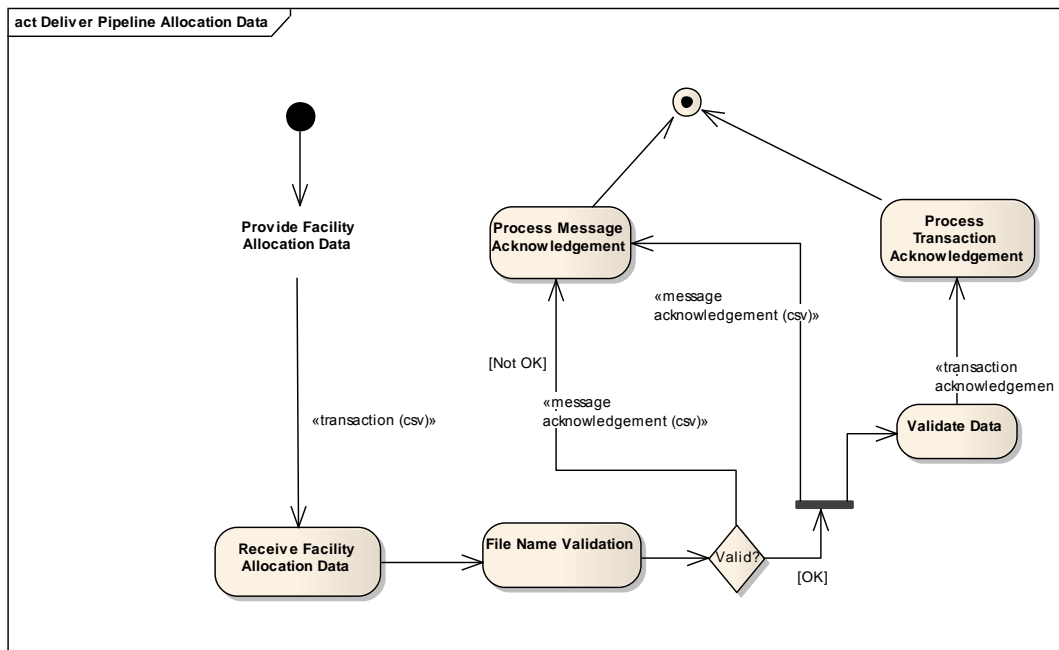


Figure 5 – Facility Allocation Interface – Activity Diagram

Field name	M/O/NR	Description
gasdate	M	The date of gas day
crn	M	The unique identifier of the Registered Facility Service. Refer to report INT720 – Facility Operator Registered Services for a complete list of Registered Services
facilityid	M	The STTM unique identifier for the facility. Refer to report INT671 – Hub and Facility Definitions for a complete list of all STTM facilities.

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
allocationquantity	M	The quantity of the net flow allocated to the Registered Facility Service which takes into account of any positive MOS quantity or negative MOS quantity allocated to the Registered Facility Service.
mosquantity	M	<p>The total quantity of MOS and overrun MOS allocated to the Registered Facility Service.</p> <p>Report INT721 – Pipeline Operator MOS Stack helps identify whether the contract holder is a MOS provider.</p> <p>This field is:</p> <ul style="list-style-type: none"> • positive when MOS gas on the facility is required to increase gas at the hub • negative when MOS on the facility is required to decrease gas at the hub • zero when MOS is not applicable on the facility or when the holder of the Registered Facility Service is not a MOS provider or when the MOS allocation is zero
ucmosquantity	M	<p>The quantity of overrun MOS allocated to the Registered Facility Service.</p> <p>This field is:</p> <ul style="list-style-type: none"> • positive when overrun MOS gas is required to increase gas at the hub • negative when overrun MOS is required to decrease gas at the hub • zero when MOS is not applicable on the facility or when the overrun MOS allocation is zero

Table 23 – Facility Allocation Interface Format

Trigger	At a specific time every day, allocation agent for facility operator prepares facility allocation data to be submitted to AEMO
STTM Rules Section Reference	419
Pre-condition	<p>The facility allocation agent must have</p> <ul style="list-style-type: none"> • The STTM unique facility identifier • a list of all 'Active' Contract Registration Numbers (crns) for the facility for the relevant gas day. Facility operators may source this from the STTM report INT720. • MOS stack information

Post-condition	Facility allocation agent receives an acknowledgement file. Allocation data submitted is reported in: <ul style="list-style-type: none">• public report INT658 – Allocation Quantity• Trading participant report INT703 – Trading Participant Provisional Allocation
-----------------------	--

Variations	
	<p>This file may be sent with the following file descriptor types:</p> <p>'PAD' - Daily File 'PAU' – Update File 'PAP' – Preliminary File 'PAF' – Final File 'PAR' – Revision File</p> <p>A Daily STTM facility allocation file must contain data for one gas day. Any Update, Preliminary, Final or Revision facility allocation file may contain records for one or more gas days. Preliminary, Final and Revision allocations must contain an allocation for each gas day of the billing month. When multiple files are used for allocations, a gas day must not span multiple files.</p> <p>Note: The filename convention limits files to a maximum of 999 rows.</p> <p>Daily STTM facility allocations must be sent by Gas Day Start + 4:30 Hours the day after the gas day to which the allocations relate. Updates, Preliminary, Final and Revision allocations must be provided as required in the STTM Rules and Procedures. The STTM Systems will <i>not</i> reject allocation files that are submitted after the time by which the STTM Rules and Procedures require them to be submitted. However, default allocation values may be used if STTM facility allocation and MOS step allocations are not received in time.</p> <p>If a valid Daily STTM facility allocation is received after the first submission cut off and prior to the extended submission cut-off time then any subsequent submissions will be processed by AEMO but only the first valid allocation data submission will be used in the delayed ex post schedule.</p> <p>Multiple allocations of the same allocation type (Daily, Updated, Preliminary, Final, Revision) may be submitted for a given gas day so long as the the hierarchy is maintained I.e.,:</p> <p>"Daily" allocations for a given day can be followed by daily, update, preliminary, final or revision allocations for that day. "Update" allocations for a given day must only be followed by update, preliminary, final or revision allocations for that day. "Preliminary" allocations for a given day must only be followed by preliminary, final or revision allocations for that day. "Final" allocations for a given day must only be followed by final or revision allocations for that day. "Revision" allocations for a given day must only be followed by revision allocations for that day.</p> <p>Note: STTM rules 468, 469 and 473 cover the timing requirements for preliminary, final and revision statements. STTM procedure 7.2.1 covers the requirement for submission of billing period allocations in relation to the timing of the preliminary, final and revision statements.</p>

Table 24 – Facility Allocation Transaction Context

Field	Validation Name	Event Code	Description
gasdate	Gas date validation	4612	The gas date must be provided in the specified date format : YYYY-MM-DD.
gasdate	Gas date validation	4613	The gas date must be in the past.
crn	CRN validation	4618	CRN of the allocation data records must match the CRN of an STTM Registered Facility Service that is valid (active) for each gas date for which allocation data is submitted against that CRN.
facilityid	Facility ID validation	4616	The facility ID submitted must be a valid STTM facility ID published in report INT671 – Hub and Facility Definitions.
allocationquantity	Allocation Quantity Validation	4614	The Allocation quantity must be greater than or equal to zero.
mosquantity	MOS Quantity Validation	4632, 4633	Absolute value of Total MOS must be \geq absolute value of Overrun MOS in Facility Allocation record Total MOS and Overrun MOS in Facility Allocation record must have the same sign.
ucmosquantity	Overrun MOS Quantity Validation	4633	Total MOS and Overrun MOS in Facility Allocation record must have the same sign.

Table 25 – Facility Allocation Field Validations

Validation	Event Code	Description
Data Provider	4600	This error code indicates that the Facility Allocation has not been provided by the organisation nominated as the Allocation Agent for the Facility in the STTM.
Trading Participant	4601	The allocation file must contain allocations for every Trading Participant who holds an active Registered Facility Service with the submitting STTM Pipeline Operator.

Validation	Event Code	Description
Mandatory Fields	4611	All mandatory fields for the allocation files must be provided.
Allocation Agent Registration	4615	The company submitting the allocation data must be an active STTM participant for each gas date for which allocation data is submitted by the company.
Allocation Agent	4617	Company submitting allocation data must be the Allocation Agent for the Facility.
CRN Full List	4620	Facility Allocation file must supply the complete set of CRNs that are active for the gas day on the facility.
Duplicate Allocation	4631	Duplicate Facility Allocation records not permitted.
Invalid HUB	4634	The STTM Hub associated with the Facility Allocation must be valid.
System Error	4635	System error – Facility Allocation Transaction must be valid.
Invalid MOS Allocation	4644	MOS must only be allocated to a shipper who is a valid MOS provider for the facility and gas day.
Invalid Allocation Quantity	4645	Total Facility Allocation quantity must not exceed the registered maximum facility hub capacity for the facility.
Aggregate Facility Allocation Mismatch	4653	Facility allocations must sum to STTM withdrawal zone CTM data plus Transmission Connected STTM User (TCSU) allocations for given day and facility where applicable.
Upper Warning Limit	4654	<p>Total Facility Allocation exceeds the upper warning limit of the Facility.</p> <p>Where:</p> <ul style="list-style-type: none"> The upper warning limit is: 30 day rolling average of the <i>allocation quantity</i> + 4 standard deviations of those allocation quantities The <i>allocation quantity</i> used is the sum of the allocation quantities for contracts flowing TO the hub + the sum of the MOS allocation quantities for contracts flowing FROM the hub. <p><i>Note: Upper threshold validation only applies to PAD files submitted before the first cut-off time on D+1. Where a delayed Ex Post schedule is required, this validation is also applied to PAD files submitted during the extended submission window before the second cut-off time.</i></p>
Lower Warning Limit	4655	<p>Total Facility Allocation is lower than the lower warning limit of the Facility.</p> <p>Where:</p> <ul style="list-style-type: none"> The lower warning limit is: 30 day rolling average of the <i>allocation quantity</i> – 4 standard deviations of those allocation quantities The <i>allocation quantity</i> used is the sum of the allocation quantities for contracts flowing TO the hub + the sum of the MOS allocation quantities for contracts flowing FROM the hub. <p><i>Note: Lower threshold validation only applies to PAD files</i></p>

Validation	Event Code	Description
		<i>submitted before the first cut-off time on D+1. Where a delayed Ex Post schedule is required, this validation is also applied to PAD files submitted during the extended submission window before the second cut-off time.</i>
One facility per PAD file	4656	Only one facility is allowed per PAD file.
One gas day per PAD file	4657	Only one gas day is allowed per PAD file.
Submission window	4658	PAU, PAP, PAF and PAR can only be submitted on and after D+2 for gas date D.
D+1 data in PAD file	4659	PAD file can only include D+1 data for gas date D. <i><u>Note: Error message in the ACK file "gas date for daily file is not D-1" is incorrect and will be fixed in Gas Release 35.</u></i>

Table 26 – Facility Allocation Process Validations

2.8 Registered Facility Service Allocation

The allocation agent – nominated by the contract holder of the Registered Facility Service at the time of registration of the Trading Rights associated with the service – must submit Registered Facility Service Allocation data to AEMO daily for gas day D on D+1. Updated Registered Service Facility allocation data can be submitted at anytime after the successful submission of the original daily allocation data up until when the Preliminary settlement registered facility allocation data is submitted. The allocation agent must submit Preliminary, Final and Revision Registered Facility Service allocations to AEMO for market settlement for each billing period.

Where an allocation agent is not specified for a Registered Facility Service or when Registered Facility Service allocation data is not received by the cut off time specified in the STTM Rules, AEMO performs the default allocation in accordance with the STTM rules and procedures.

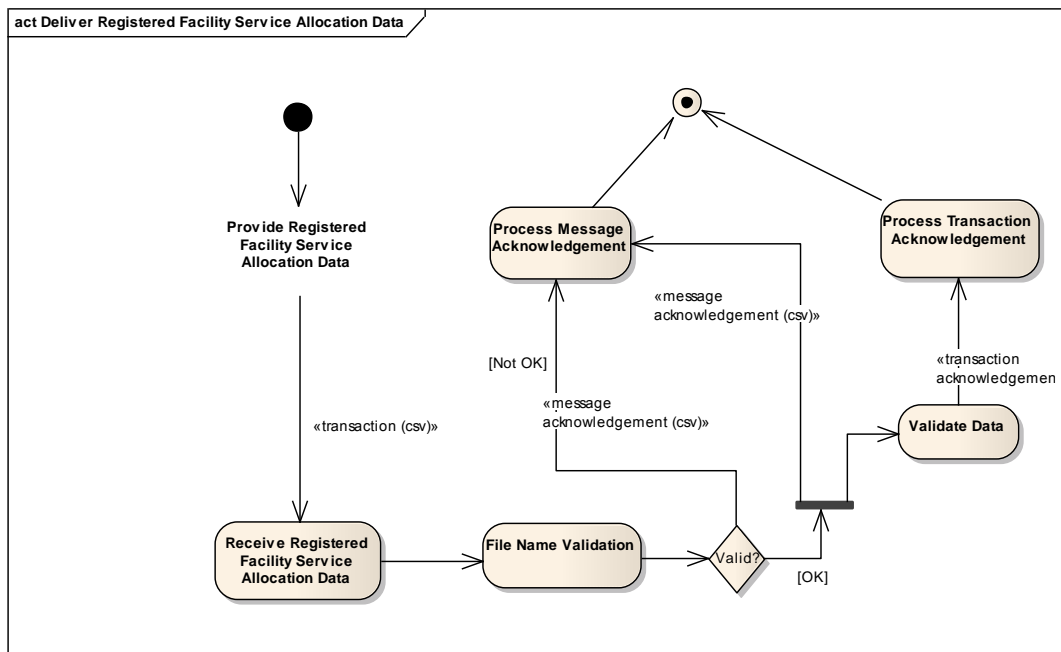


Figure 6 – Registered Facility Service Allocation Interface – Activity Diagram

Field name	M/O/NR	Description
gasdate	M	The date of the gas day
trn	M	The Trading Right Number A list of valid Trading Right Numbers for each Trading Participant is provided in report INT706 – Trading Participant Trading Rights. Report INT705 – Trading Participant Registered Services provides the contract holder with all Trading Right Numbers associated with the Registered Services for which the Trading Participant is the holder.
facilityid	M	The facility ID submitted must be a valid STTM facility ID published in report INT671 – Hub and Facility Definitions.

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
allocationquantity	M	The Allocation quantity allocated to the Trading Right. Where the Trading Right Number is that of the contract holder, this quantity is the net flow taking into account of any positive MOS quantity or negative MOS quantity allocated to the Registered Facility Service to which Trading Right is associated.
facilityallocationidentifier	O	This optional field may contain the unique identifier for the facility allocation transaction that the registered facility service allocation is based on. This is obtained from the STTM report INT703.

Table 27 – Registered Facility Service Allocation Interface Format

Trigger	At a specific time every day, allocation agent for Registered Facility Service prepares facility service allocation data to be submitted to AEMO
STTM Rules Section Reference	420
Pre-condition	Allocation Agent for Registered Facility Service must have: <ul style="list-style-type: none"> • Been registered as the allocation agent for the Registered Facility Service • A list of Trading Right Numbers associated with the Registered Facility Service for each gas date relevant to allocation • The ability to identify the Trading Right Number of the contract holder • Received facility allocation for the Registered Facility Service including the MOS allocation
Post-condition	Registered Service allocation agent receives an acknowledgement file. Registered Facility Service allocation data submitted is used by AEMO to generate report IN703 – Trading Participant Provisional Allocation

Variations	
	<p>This file may be sent with the following file descriptor types:</p> <ul style="list-style-type: none"> 'TPD' - Daily File 'TPU' – Update File 'TPP' – Preliminary File 'TPF' – Final File 'TPR' – Revision File <p>Any Daily, Update, Preliminary, Final or Revision Allocation file may contain records for one or more gas days. Preliminary, Final and Revision allocations must contain an allocations for each gas day of the billing month. When multiple files are used for allocations, a gas day must not span multiple files.</p> <p>Note: The filename convention limits files to a maximum of 999 rows.</p> <p>Daily allocations must be sent by Gas Day Start + 4:30 Hours, the day after the gas day to which the allocations relate. Updates, Preliminary, Final and Revision allocations must be provided as required in the STTM Rules and Procedures. The STTM Systems will <i>not</i> reject allocation files that are submitted after the time by which the STTM Rules and Procedures require them to be submitted. However, default allocation values may be used if actual allocations are not received in time.</p> <p>Multiple allocations of the same allocation type (Daily, Updated, Preliminary, Final, Revision) may be submitted for a given gas day so long as the the hierarchy is maintained i.e.,:</p> <p>"Daily" allocations for a given day can be followed by daily, update, preliminary, final or revision allocations for that day.</p> <p>"Update" allocations for a given day must only be followed by update, preliminary, final or revision allocations for that day.</p> <p>"Preliminary" allocations for a given day must only be followed by preliminary, final or revision allocations for that day.</p> <p>"Final" allocations for a given day must only be followed by final or revision allocations for that day.</p> <p>"Revision" allocations for a given day must only be followed by revision allocations for that day.</p> <p>Note: Registered Facility Service allocations must be provided after Facility Allocations for the associated Facility have been provided i.e. the Registered Facility Service allocations must be provided once the corresponding Facility Allocations has been successfully submitted to the AEMO systems and a positive acknowledgement (ACK) has been received for that allocation.</p> <p>STTM rules 468, 469 and 473 cover the timing requirements for preliminary, final and revision statements. STTM procedure 7.2.1 covers the requirement for submission of billing period allocations in relation to the timing of the preliminary, final and revision statements.</p>

Table 28 – Registered Facility Service Allocation Transaction Context

Field	Validation Name	Event Code	Description
gasdate		4612	The gas date must be provided in the specified date format : YYYY-MM-DD
gasdate		4613	The gas date must be in the past.
trn		4604	The Trading Rights submitted must cover the gas date.
allocationquantity		4605	The sum of the quantities for a gas date against each Trading Right in the Registered Facility Service allocation file must be equal to that of the associated Registered Service Facility including MOS Note: A Registered Service allocation file must only contain allocations associated with Trading Rights for a single Registered Service.

Table 29 - Registered Facility Service Allocation Field Validations

Validation	Event Code	Description
Data Provider	4600	This error code indicates that the Registered Facility Service Allocation has not been provided by the organisation nominated as the Allocation Agent for the Registered Facility Service in the STTM.
Mandatory Fields	4611	All mandatory fields for the allocation files must be provided.
Inactive Registered Facility Service	4602	The Registered Facility Service Allocation file must be associated with a Registered Facility Service that is active for the gas date for which the allocation data is submitted.
Missing Trading Rights	4603	The Registered Facility Service Allocation file must contain allocation data for every associated trading right.
Duplicate Allocation Record For Gas Day	4631	Registered Facility Service Allocation file must not contain duplicate records for a gas day.

Validation	Event Code	Description
Invalid Trading Rights	4637	Registered Facility Service Allocation file must contain allocations for all active Trading Rights for the Registered Facility Service.
Invalid Hub	4639	The STTM Hub associated with the Registered Facility Service Allocation must be valid.
System Error	4640	System error – Registered Facility Service Allocation Transaction must be valid.

Table 30 – Registered Facility Service Allocation Process Validations

2.9 MOS Step Allocation

The facility operator must submit MOS Step Allocation Data to AEMO in a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

Where a valid facility allocation and MOS step allocation has not been received by the ex post cut off time, AEMO will perform the default allocation in accordance with the rules and procedures. If a default allocation has been processed for a facility then the relevant allocation agent must submit a new facility allocation and MOS step allocation.

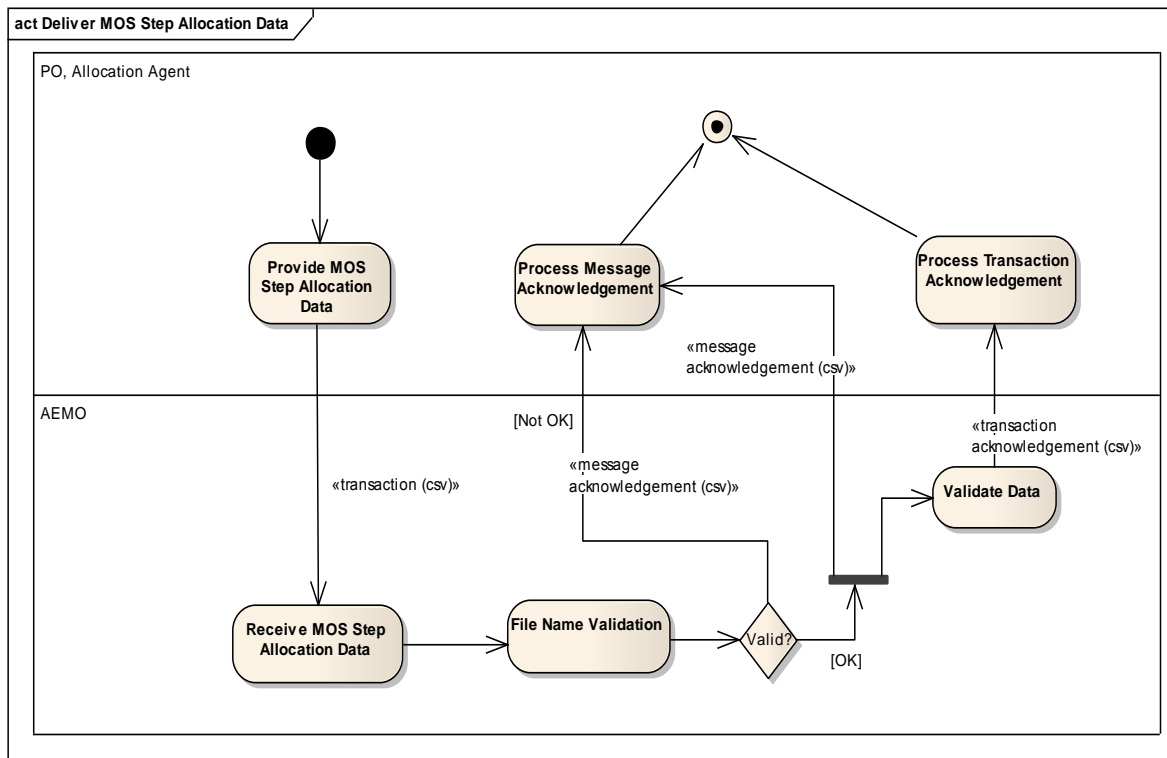


Figure 7 – MOS Step Allocation Interface – Activity Diagram

Field name	M/O/NR	Description
gasdate	M	The gas date for the MOS Step Allocation
mosstackid	M	The identifier for the MOS Stack relevant for the gas day. (sourced from MIS Report INT721)
mosstepid	M	The MOS Stack Step (1 to n) to which the allocation quantity has been associated (sourced from MIS Report INT721)
facilityid	M	The STTM Facility Identifier (enumerated in the data dictionary).
mosstepallocationquantity	M	The allocation quantity in GJ that has been associated with the MOS Stack Step.

Table 31 – MOS Step Allocation Interface Format

Trigger	This transaction is created when the Allocation Agent has determined the MOS allocations for a MOS stack for a gas day.
STTM Rules Section Reference	419, 421
Pre-condition	The latest published MOS stacks for each gas day covered by the allocations must be used to determine the MOS step allocations. The key market system data source for this transaction is MIS Report 721.
Post-condition	The MOS step allocation file is validated by market systems and used in Settlement calculations.
Variations	<p>This file may be sent with the following file descriptor types:</p> <ul style="list-style-type: none"> 'MSD' - Daily File 'MSU' – Update File 'MSP' – Preliminary File 'MSF' – Final File 'MSR' – Revision File <p>Daily allocations must be sent by Gas Day Start + 4:30 Hours, the day after the gas day to which the allocations relate. Updates, Preliminary, Final and Revision allocations must be provided as required in the STTM Rules and Procedures. The STTM Systems will <i>not</i> reject allocation files that are submitted after the time by which the STTM Rules and Procedures require them to be submitted. However, default allocation values may be used if STTM facility allocation and MOS step allocations are not received in time.</p> <p>Multiple allocations of the same allocation type (Daily, Updated, Preliminary, Final, Revision) may be submitted for a given gas day so long as the the hierarchy is maintained I.e.,:</p> <p>"Daily" allocations for a given day can be followed by daily, update, preliminary, final or revision allocations for that day.</p> <p>"Update" allocations for a given day must only be followed by update, preliminary, final or revision allocations for that day.</p> <p>"Preliminary" allocations for a given day must only be followed by preliminary, final or revision allocations for that day.</p> <p>"Final" allocations for a given day must only be followed by final or revision allocations for that day.</p> <p>"Revision" allocations for a given day must only be followed by revision allocations for that day.</p> <p>Note: MOS Step allocations must be provided after Facility Allocations for the associated Facility have been provided i.e. the MOS Step allocations must be provided once the corresponding Facility Allocations has been successfully submitted to the AEMO systems and a positive acknowledgement (ACK) has been received for that allocation.</p> <p>MOS Step Allocations must be provided such that the MOS Step Allocation files contain allocations for only one facility for one gas day per file. For billing period submissions of MOS Step Allocations up to 31 such files –to cover an entire month- may be required to cover all of the</p>

	<p>days in the billing period.</p> <p>The validation that matches MOS Step Allocations against Facility Allocations will be executed on a day by day basis and where validations fail for a day, only the MOS Step Allocation file for that single day will be rejected.</p> <p>STTM rules 468, 469 and 473 cover the timing requirements for preliminary, final and revision statements. STTM procedure 7.2.1 covers the requirement for submission of billing period allocations in relation to the timing of the preliminary, final and revision statements.</p> <p>Example: As per the STTM rules and procedures, preliminary Facility Allocations for a billing period must be submitted 4 business days before the preliminary settlement is run for that month (which is defined in the rules as due within 7 business days after the end of a billing period).</p> <p>If the Facility Allocations are submitted in a single file covering the entire billing period, once accepted by the AEMO systems they must be followed by matching MOS Step allocations submitted using one MOS Step allocation file per gas day.</p> <p>If a matching set of Facility and Mos Step Allocations for all days in the billing period has not been received and accepted by the STTM systems at the time the settlement (or prudential) processing is initiated, default allocations may be used for the gas days impacted by the mismatched or missing data.</p>
--	---

Table 32 – MOS Step Allocation Transaction Context

Field	Validation Name	Event Code	Description
mosstepid	Invalid step	4606	This error indicates the MOS stack / step identifier is not valid.
mosstepallocationquantity	Quantity check	4607	<p>The total of the Contracted (i.e. offered) MOS Quantity on the Facility allocation transaction when aggregated to the Trading Participant (i.e. Contract Holder) level must match the total MOS step allocations on the same facility for the Contract Holder of the associated MOS step Trading Rightsthe same Trading Participant and gas day.</p> <p>MOS Step allocations can be identified as increase MOS or decrease MOS by the MOS Stack type of the MOS Stack associated with the MOS Step allocation.</p> <p>This validation will fail if the Facility allocations are not successfully submitted to AEMO before the MOS Step allocations are submitted.</p>

Field	Validation Name	Event Code	Description
	Less than zero	4608	The MOS Step Quantity must be greater than or equal to zero.
	MOS Step Offer Quantity Exceeded	4610	The MOS Step Quantity must not be greater than the permissible quantity for the MOS Stack Step (see MIS Report INT721, step_quantity)

Table 33 – MOS Step Allocation Field Validations

Validation	Event Code	Description
Correct data provider	4600	The data provider has not been configured in the system as the provider of the submitted data.
More than one day	4609	The file contains records covering more than one gas day. Note: MOS Step Allocation files must only contain allocations for a single day per file.
Mandatory fields	4611	All mandatory fields must be populated.
Day format	4612	Gas day format incorrect.
Historical gas day	4613	Gas day must be in the past.
Active Participant	4615	The allocation agent must be registered by AEMO as an Allocation Agent for the gas day.
Facility Identifier	4616	The Facility Identifier must match that provided on MIS report INT721 (facility_identifier).
Data Provider	4600	This error code indicates that the MOS Step Allocation has not been provided by the organisation nominated as the Allocation Agent for the MOS Step Allocation in the STTM.
Unused MOS Step ID	4622	Allocations must be provided for every valid MOS Step for the Increase and Decrease Stacks that apply for the facility for the gas day.
Duplicate MOS Step Allocation	4621	Allocation file must not contain duplicate MOS Step Allocation records for a gas day in the file.
Missing Registered Service	4623	Missing Trading Participant Registered Service for MOS Step Allocation. Every MOS provider must have an active registered service for the same gas day.
Missing Registered Service Allocation	4624	Missing Trading Participant Registered Service Allocations for MOS Step Allocation.
Invalid Hub	4625	The STTM Hub associated with the MOS Step Allocation must be valid.
System Error	4626	System error – MOS Step Allocation Transaction must be valid.

Table 34 – MOS Step Allocation Process Validations

2.10 Market Schedule Variation

Trading Participants acting in the Registrable Role of STTM Participant may submit Market Schedule Variation data to the market systems.

The rules governing the permissible permutations of submitter type, counter-party type, MSV type, submitter facility and counter-party facility and the consequent impact on the submitter Modified Market Schedule and counter-party Modified Market Schedule are covered in the STTM Rules and Procedures that cover Market Schedule Variations. The following table provides a diagrammatic representation of the valid MSV 'scenarios' that are allowed.

Table 35 – MSV Scenarios

			Counter-party to the MSV					
			Shipper flowing to the hub		Shipper flowing from the hub		Network user flowing from the hub	
			Increase MMS	Decrease MMS	Increase MMS	Decrease MMS	Increase MMS	Decrease MMS
Participant submitting MSV	Shipper flowing to the hub	Increase MMS		F S	C P		C N	
	Shipper flowing to the hub	Decrease MMS				C P		C N
	Shipper flowing from the hub	Increase MMS				F S		F N
	Shipper flowing from the hub	Decrease MMS					F N	
	Network user flowing from the hub	Increase MMS						F O
	Network user flowing from the hub	Decrease MMS						

Legend	
	Not possible, MSV will be rejected
F	No Variation charge
C	Chargeable variation
S	Counter-party Facility must not be provided and is interpreted by market systems as being the same Facility as the Submitter Facility.
N	Counter-party facility must not be provided and is interpreted by market systems as being the Hub to which the Submitter Facility is attached.
P	Counter-party facility must be provided and must be on the same hub as the Submitter Facility.
O	Counter-party facility must be either: not provided and is interpreted by market systems as being the same Facility as the Submitter Facility; or provided and must be the same Facility as the Submitter Facility.

The submission must be as a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

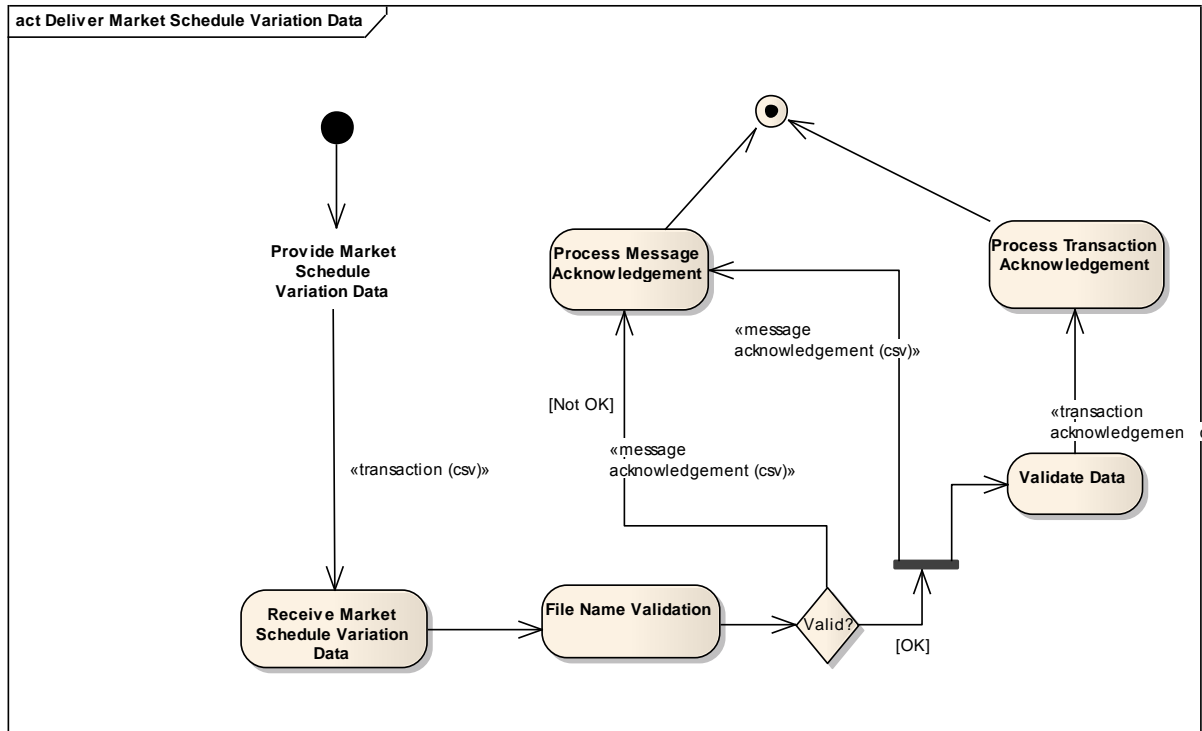


Figure 8 – Market Schedule Variation FTP / HTTP Interface – Activity Diagram

Field name	M/O/NR	Description
gasdate	M	The gas date for which the MSV is to be applied in Settlement calculations.
submitterid	M	The Participant Identifier of the submitter of the MSV. Note that the submitter must be an active Shipper or Network User.
submittertype	M	The flow direction for the Submitter: <ul style="list-style-type: none"> • SFH (shipper flowing from the hub) • STH (shipper flowing to the hub) • NAH (network user at the hub)

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
submitterfacilityid	M	The Facility Identifier for the Submitter <ul style="list-style-type: none"> • SEAGAS (South East Australia Gas pipeline) • MSP (Moomba to Sydney pipeline) • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility)
counterpartyid	M	The Participant Identifier of the Counter-party to the MSV. Refer to MIS Report INT670 for a complete list.
counterpartytype	M	The flow direction for the Counter-party: <ul style="list-style-type: none"> • SFH (shipper flowing from the hub) • STH (shipper flowing to the hub) • NAH (network user at the hub)
counterpartyfacilityid	O	The Facility Identifier for the Counter-party to the MSV: <ul style="list-style-type: none"> • SEAGAS (South East Australia Gas pipeline) • MSP (Moomba to Sydney pipeline) • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility)
msvtype	M	Refers to the impact on the Submitters Modified Market Schedule; I for increasing the Submitters Modified Market Schedule, D for decreasing the Submitters Modified Market Schedule.
msvquantity	M	The quantity in GJ by which the submitter and counter-party Modified Market Schedule is to be impacted.

Table 36 – Market Schedule Variation Submission Interface Format

Trigger	A Trading Participant acting in the Registrable Role of Shipper or Network User wants to modify their Modified Market Schedule and the counter-party Modified Market Schedule
STTM Rules Section Reference	423
Pre-condition	Both the submitter and the counter-party to the MSV must be Registered Trading Participants. Both participants should have a Trading Right in order to submit or 'accept an MSV, and the submitter must be an Active Shipper or Network User and the counter-party must be active in the Registrable Role selected for them by the submitter.
Post-condition	<p>Following successful validation the Market Schedule Variation is treated as an entirely new – i.e. does not replace any existing - Market Schedule Variation.</p> <p>The Market Schedule Variation will then appear in the daily Market Schedule Variation report (INT709) for both the submitter and for the counter-party.</p> <p>The counter-party may choose to accept or reject or leave the MSV.</p> <p>The market system Settlements engine will use MSVs in calculations but only accepted MSVs.</p>

Table 37 - Market Schedule Variation Submission Transaction Context

Field	Validation Name	Event Code	Description
submitterid	Invalid Submitter	4500	This error code indicates the Participant is not a Registered Trading Participant.
submittertype	Invalid Submitter Type Code	4501	This error code indicates the Submitter type is not valid. Must be STH (Shipper flowing to the hub) or SFH (Shipper flowing from the hub) or NAH (Network User).
submittertype	Invalid 'Shipper from the hub' Submitter Type.	4509	<u>Submitter Type</u> is 'shipper from the hub', but the <u>Submitter ID</u> is not registered in the STTM as 'Shipper' at the hub associated with the Submitter Facility.
submittertype	Invalid 'Shipper to the hub' Submitter Type.	4510	<u>Submitter Type</u> is 'shipper to the hub', but the <u>Submitter ID</u> is not registered in the STTM as 'Shipper' at the hub associated with the Submitter Facility.
submitterfacilityid	Invalid Submitter Facility Identifier	4502	This error code indicates the Submitter Facility Identifier is not valid.
gasdate	Invalid Gas Date	4503	This error code indicates the gas date is not valid. Refer to error code 4515 for the relationship between the submission date and the gas date.

Field	Validation Name	Event Code	Description
counterpartyid	Invalid counter-party Identifier	4504	This error code indicates the counter-party identifier is not valid. Refer to MIS Report INT670. Note: where the counterparty id is the same as the submitter id, the MSV will be saved as 'Confirmed' and will not require further confirmation.
counterpartytype	Invalid Counter-party Type	4505	This error code indicates the Counter-party Type is not valid. Must be STH (Shipper flowing to the hub) or SFH (Shipper flowing from the hub) or NAH (network user).
counterpartyfacilityid	Invalid Counter-party Facility Identifier	4506	This error code indicates the Counter-party facility is either; populated when it must not be populated, or, not populated when it must be populated (refer to Table 35 – MSV Scenarios).
msvquantity	Invalid quantity	4507	This error code indicates the quantity is not an integer greater than or equal to zero..
msvtype	Invalid MSV Type	4508	This error code indicates the MSV Type is invalid. The value must be I or D. I indicates the impact of the MSV is to increase the Submitter Modified Market Schedule. D indicates the impact of the MSV is to decrease the Submitter Modified Market Schedule.
submittertype	Invalid Submitter ID	4521	Submitter Type is 'network user', but the Submitter ID is not registered in the STTM as 'network user' at the hub associated with the Submitter Facility.
msvtype	Invalid MSV type	4522	The MSV Type for Submitter must be 'increase' when both Submitter Type and Counter Party Type are 'network user'
counterpartytype	Invalid Counter Party Type	4523	The Counter Party Type must be 'network user' when Submitter Type is 'network user'
submitterfacilityid	Invalid Submitter facility	4524	The Submitter Facility must be a network facility when Submitter Type is 'network user'
counterpartyfacilityid	Invalid Counter Party Facility	4525	For a user to user MSV the Counter Party Facility must be either NULL or same as the Submitter Facility
Submission date	Invalid submission date	4526	User-to-user MSV functionality is not yet activated

Table 38 - Market Schedule Variation Submission Field Validations

Validation	Event Code	Description
Submission date	4515	This error code indicates the MSV submission has been received outside of the allowable window for the gas day. (Refer to STTM Rules for the current definition of the window)
Single record per file	4008	Only one MSV submission is allowed per file.

Table 39 - Market Schedule Variation Submission Process Validations

Field name	M/O/NR	Description
gasdate	M	The gas date for which the MSV is to be applied in Settlement calculations.
submitterid	M	The Participant Identifier of the submitter of the MSV. Note that the submitter must be an active Shipper or Network User.
submittertype	M	The flow direction for the Submitter: <ul style="list-style-type: none"> • SFH (shipper flowing from the hub) • STH (shipper flowing to the hub) • NAH (network user at the hub)
submitterfacilityid	M	The Facility Identifier for the Submitter <ul style="list-style-type: none"> • SEAGAS (South East Australia Gas pipeline) • MSP (Moomba to Sydney pipeline) • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility)
counterpartyid	M	The Participant Identifier of the Counter-party to the MSV. Refer to MIS Report INT670 for a complete list.
counterpartytype	M	The flow direction for the Counter-party: <ul style="list-style-type: none"> • SFH (shipper flowing from the hub) • STH (shipper flowing to the hub) • NAH (network user at the hub)

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
counterpartyfacilityid	O	The Facility Identifier for the Counter-party to the MSV: <ul style="list-style-type: none"> • SEAGAS (South East Australia Gas pipeline) • MSP (Moomba to Sydney pipeline) • MAP (Moomba to Adelaide pipeline) • EGP (Eastern Gas Pipeline) • ROS (Rosalind Park production facility, Sydney Gas) • NETSYD1 (distribution service at the Sydney hub) • NETADL1 (distribution service at the Adelaide hub) • NETBRI1 (Brisbane hub facility)
msvtype	M	Refers to the impact on the Submitters Modified Market Schedule; I for increasing the Submitters Modified Market Schedule, D for decreasing the Submitters Modified Market Schedule.
msvquantity	M	The quantity in GJ by which the submitter and counter-party Modified Market Schedule is to be impacted.
msvid	M	The AEMO identifier for a submitted Market Schedule Variation, reported in the STTM report INT709.
msvstatus	M	The confirmation status: CONFIRM or REJECT.

Table 40 - Market Schedule Variation Confirmation Interface Format

Trigger	A Trading Participant who is a counterparty to a Market Schedule Variation determines they want to confirm (or reject) that Market Schedule Variation as per the STTM Rules.
STTM Rules Section Reference	423
Pre-condition	The counterparty will have all of the information relating to the submitted Market Schedule Variation including the unique AEMO identifier of the Market Schedule Variation. This is available in the STTM MIS Report INT709.
Post-condition	Following successful validation, the Market Schedule Variation Confirmation will result in AEMO noting the associated Market Schedule Variation as confirmed (or rejected) and if confirmed that variation will be used in the calculation of settlement and prudential payments and charges for the participants. Specifically, this effects the deviation charges and payments and the variation charges that the submitter and counterparty to the Market Schedule Variation are subject to.

Table 41 - Market Schedule Variation Confirmation Transaction Context

Field	Validation Name	Event Code	Description
msvstatus	Invalid msvstatus	4520	The msvstatus must be 'CONFIRM' or 'REJECT'

Table 42 – Market Schedule Variation Confirmation Field Validations

Validation	Event Code	Description
Submission date	4515	This error code indicates the MSV confirmation has been received outside of the allowable window for the gas day. (Refer to STTM Rules for the current definition of the window).
Matched submission	4518	This error code indicates the Market Schedule Variation (MSV) confirmation could not be matched to a submitted MSV in the AEMO systems.
Submitter	4519	This error code indicates that the MSV confirmation was submitted by a participant who is not the counterparty to the MSV.
Single record per file	4008	Only one MSV confirmation is allowed per file.

Table 43 - Market Schedule Variation Confirmation Process Validations

2.11 Data Confirmation

The STTM Facility Operator provides Confirmation Data to AEMO. AEMO will send the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the STTM Facility Operator.

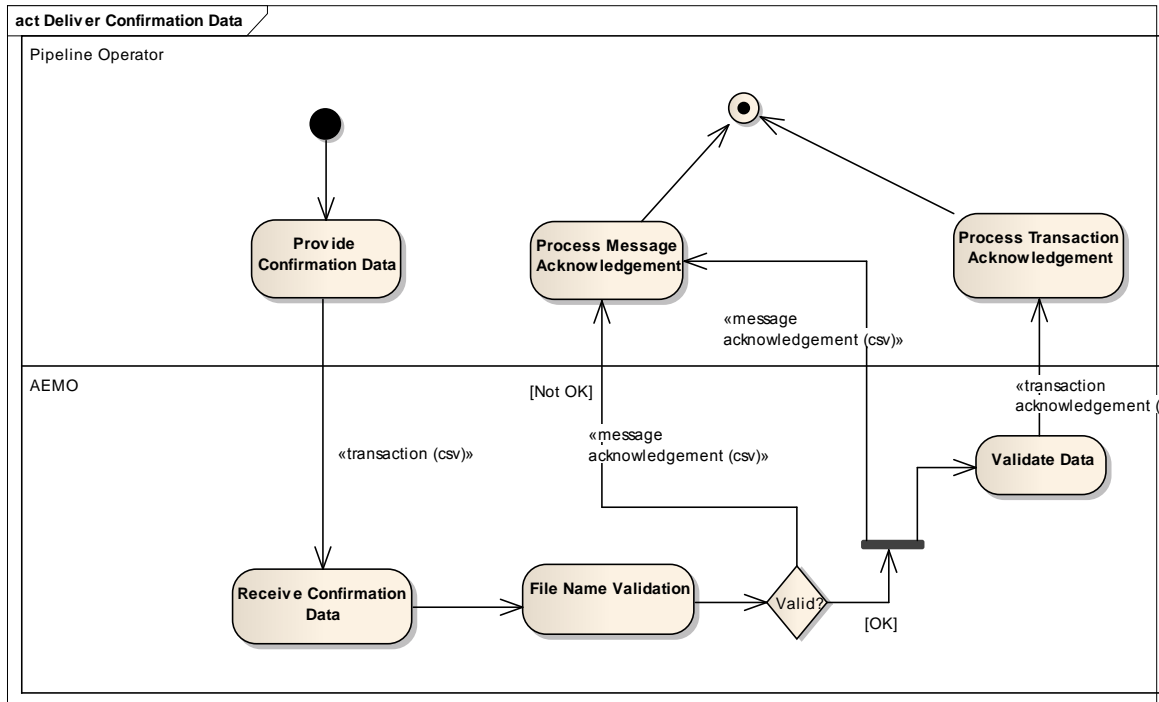


Figure 9 - Data Confirmation Interface - Activity Diagram

Field name	M/O/NR	Description
initiatingmessageid	M	The message id supplied by the Facility Operator for the transaction that needs to be confirmed.
filetypedescriptor	M	The file type descriptor of the transaction that needs to be confirmed as specified in the field initiatingmessageid.

Table 44 - Data Confirmation Interface Format

Trigger	A Facility Operator who is a sumitter of a transaction determines to confirm that transaction as per the STTM Rules.
STTM Rules Section Reference	414, 419
Pre-condition	The Facility Operator has the message id and file type descriptor of the transaction that needs to be confirmed.
Post-condition	Following successful validation, the Data Confirmation will result in AEMO noting the associated transaction as confirmed.

Table 45 - Data Confirmation Transaction Context

Field	Validation Name	Event Code	Description
initiatingmessageid	Invalid message id	4900	The initiatingmessageid must match to a submitted transaction

Field	Validation Name	Event Code	Description
filetypedescriptor	Invalid file type descriptor	4901	The filetypedescriptor must match the matching transaction

Table 46 - Data Confirmation Field Validations

Validation	Event Code	Description
Submission date	4903	This error code indicates the submission date of the data confirmation file is not the same as the submission date of the data file of the matching record file.
Single record per file	4904	Only one data confirmation is allowed per file.
Confirm most recent transaction	4905	Only confirm the most recent transaction received.
Submission window	4906	Data confirmation file must be submitted before the second cutoff time.
Submission validation	4907	New Data Confirmation file cannot be submitted between the first and second cutoff time if there is a valid capacity data for the D-1 schedule.
Submission validation	4908	New Data Confirmation file cannot be submitted between the first and second cutoff time if there is a confirmed capacity data for the D-1 schedule.
Submission validation	4909	New Data Confirmation file cannot be submitted between the first and second cutoff time if there is a valid total allocation quantity.
Submission validation	4910	New Data Confirmation file cannot be submitted between the first and second cutoff time if there is a confirmed total allocation quantity.
Submission validation	4911	When default pipeline allocations are applied at the first cut-off time due to a Pipeline Allocation Data (PAD) and MOS Stack Data (MSD) file mismatch or missing MSD altogether, Data Confirmation (CFM) files can no longer be submitted after the first cut-off for the PAD file that triggered a warning high (WH) or warning low (WL) before the first cut-off. The Data Confirmation file will be rejected in this instance and the Pipeline Operator is required to re-submit the PAD and MSD files after the first cut-off and before the second cut-off, to prevent default allocations being used in the delayed ex-post schedule.

Validation	Event Code	Description

Table 47 - Data Confirmation Process Validations

2.12 Deemed STTM Distribution System Allocation

The activity diagram below shows the activity flow that follows a submission of Deemed STTM Distribution System Allocation Data by the Pipeline Operator to the AEMO STTM systems. Upon receipt of the transaction file, the STTM systems will perform primary validation (file name) and provide a Message Acknowledgment back to the submitter indicating that the file is valid or that it is in error. If the file is found to be invalid during primary validation, no further action is taken by the STTM system. If the file is found to be valid during the primary validation, the STTM system will proceed to validate the data within the file and provide a Transaction Acknowledgement back to the submitter indicating whether the file passed data validation or not.

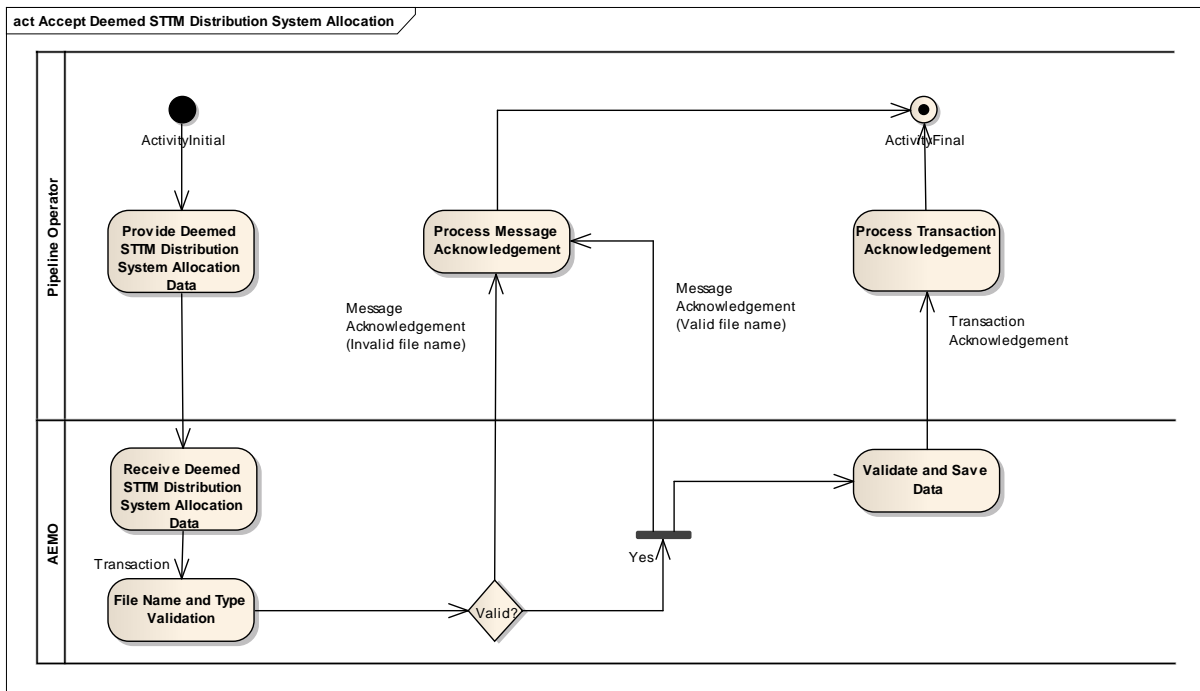


Figure 10 - Deemed STTM Distribution System Allocation – Activity Diagram

Field name	Field type	M/O/NR	Description
gasdate	Datetime	M	STTM gas day for which the allocation data relates.
participantidentifier	varchar(20)	M	STTM User to whom the allocation data relates. Refer to report INT733 – Transmission Connected STTM Users for a complete list of STTM Users on Deemed STTM Distribution Systems. This field must match the company_identifier field in the INT733 report.

<i>Field name</i>	<i>Field type</i>	<i>M/O/NR</i>	<i>Description</i>
networkidentifier	varchar(20)	M	<p>Identifier for the Deemed STTM Distribution System to which the allocation data relates.</p> <p>Refer to report INT733 – Transmission Connected STTM Users for a complete list of STTM Users on Deemed STTM Distribution Systems.</p> <p>This field must match the distribution_system_identifier field in the INT733 report.</p>
quantity	numeric(18,9)	M	Allocation quantity in Mega Joules (MJ).

Table 48 - Deemed STTM Distribution System Allocation format

Trigger	<p>Whenever the allocation agent for an STTM pipeline operator gives AEMO an allocation notice in accordance with rule 419(1) or an updated allocation notice in accordance with rule 419(4), the STTM pipeline operator must, for the relevant gas day, provide to AEMO:</p> <p>(a) an update of the quantities provided under clause 7.2.6; and</p> <p>(b) the quantity or an updated quantity of natural gas it deems to be withdrawn by each STTM User to each deemed STTM distribution system.</p>
STTM Rules and Procedures Section Reference	STTM Procedures Section 7.2.7
Pre-condition	<p>The facility allocation agent must have</p> <ul style="list-style-type: none"> a list of all STTM Users with 'Active' Deemed STTM Distribution System capacities for the facility for the relevant gas day. Facility operators may source this from the STTM report INT733.
Post-condition	<p>Facility allocation agent receives an acknowledgement file. Allocation data submitted is reported in:</p> <ul style="list-style-type: none"> public report INT658 – Allocation Quantity Trading participant report INT703 – Trading Participant Provisional Allocation Trading participant report INT734 – Trading Participant Distribution System Allocation Details

Variations	
	<p>This file may be sent with the following file descriptor types:</p> <p>'NAD' - Daily File 'NAU' – Update File 'NAP' – Preliminary File 'NAF' – Final File 'NAR' – Revision File</p> <p>Any Daily, Update, Preliminary, Final or Revision Allocation file may contain records for one or more gas days. Preliminary, Final and Revision allocations must contain an allocation for each gas day of the billing month. When multiple files are used for allocations, a gas day must not span multiple files.</p> <p>Note: The filename convention limits files to a maximum of 999 rows.</p> <p>Daily Deemed STTM Distribution System allocations must be sent by 4 ½ hours after the start of the gas day, the day after the gas day to which the allocations relate. Updates, Preliminary, Final and Revision allocations must be provided as required in the STTM Rules and Procedures. The STTM Systems will <i>not</i> reject allocation files that are submitted after the time by which the STTM Rules and Procedures require them to be submitted. However, default allocation values may be used if actual allocations are not received in time.</p> <p>Multiple allocations of the same allocation type (Daily, Updated, Preliminary, Final, Revision) may be submitted for a given gas day so long as the the hierarchy is maintained i.e.,:</p> <p>"Daily" allocations for a given day can be followed by daily, update, preliminary, final or revision allocations for that day. "Update" allocations for a given day must only be followed by update, preliminary, final or revision allocations for that day. "Preliminary" allocations for a given day must only be followed by preliminary, final or revision allocations for that day. "Final" allocations for a given day must only be followed by final or revision allocations for that day. "Revision" allocations for a given day must only be followed by revision allocations for that day.</p> <p>Deemed STTM Distribution System allocations (regardless of whether they are Daily, Updates, Preliminary, Final or Revisions) for a gas day on a facility MUST be submitted and successfully acknowledged by the STTM systems before the corresponding Facility Allocation file is submitted.</p> <p>Note: STTM rules 468, 469 and 473 cover the timing requirements for preliminary, final and revision statements. STTM procedure 7.2.1 covers the requirement for submission of billing period allocations in relation to the timing of the preliminary, final and revision statements.</p>

Table 49 – Deemed STTM Distribution System Allocation Transaction Context

Field	Validation Name	Event Code	Description
gasdate	Gas date validation	4612	The gas date must be provided in the specified date format : YYYY-MM-DD.
gasdate	Gas date validation	4613	The gas date must be in the past.
participantidentifier	STTM User validation	4646	This field must match the company_identifier field in the INT733 report.
networkidentifier	Deemed STTM Distribution System Identifier validation	4616	This field must match the distribution_system_identifier field in the INT733 report.
quantity	Allocation Quantity Validation	4614	The allocation quantity must be greater than or equal to zero.

Table 50 – Deemed STTM Distribution System Allocation Field Validations

Validation	Event Code	Description
Data Provider	4600	This error code indicates that the Deemed STTM Distribution System has not been provided by the organisation nominated as the Allocation Agent for the Facility in the STTM.
Mandatory Fields	4611	All mandatory fields for the allocation files must be provided.
Allocation Agent Registration	4615	The company submitting the allocation data must be an active STTM participant for each gas date for which allocation data is submitted by the company.
Allocation Agent	4617	Company submitting allocation data must be the Allocation Agent for the Facility.
CRN Full List	4620	Facility Allocation file must contain allocations for all STTM Users who have active capacities on the Deemed STTM Distribution System for the gas date.
Duplicate Allocation	4627	There are duplicate Distribution System Allocation records for a gas day and STTM Hub in the allocation file.
Invalid HUB	4629	The STTM Hub associated with the Distribution System Allocation is invalid.
System Error	4630	System error – Distribution System Allocation Transaction is not valid.
Multiple Registered Services	4628	Multiple Registered Distribution Services exist for an STTM User at an STTM Hub for a gas day.
Missing Registered Service	4641	There is no matching Distribution System Service associated with the non zero allocation for the gas day and hub of the allocation. Note: this error refers to the validation of network allocations whereby zero allocation records can be submitted for participants who are not registered or have no capacity in the STTM for that gas day. However the system will not allow non

Validation	Event Code	Description
		zero allocations for such participants.
Missing Allocation	4642	Allocation file for an STTM Hub must contain data for all Distribution System Services on that Distribution System that are active for each gas day for which allocation data is submitted.

Table 51 – Deemed STTM Distribution System Allocation Process Validations

2.13 Pipeline CTM Data

The activity diagram below shows the activity flow that follows a submission of CTM Data by the Pipeline Operator to the AEMO STTM systems. Upon receipt of the transaction file, the STTM systems will perform primary validation (file name) and provide a Message Acknowledgment back to the submitter indicating that the file is valid or that it is in error. If the file is found to be invalid during primary validation, no further action is taken by the STTM system. If the file is found to be valid during the primary validation, the STTM system will proceed to validate the data within the file and provide a Transaction Acknowledgement back to the submitter indicating whether the file passed data validation or not.

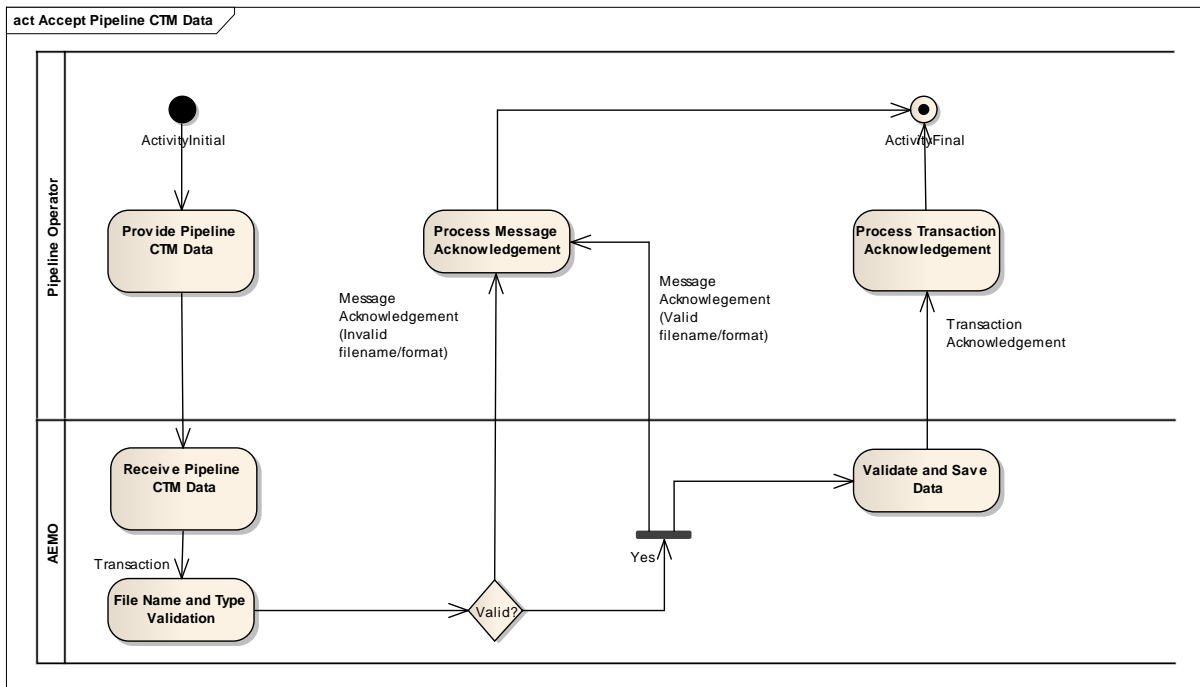


Figure 11 - Pipeline CTM Data – Activity Diagram

Field name	Field type	M/O/NR	Description
mirn	varchar(10)	M	Meter Installation Registration Number
gasdate	Datetime	M	ccyy-mm-dd
consumedenergygj	Numeric(18,9)	M	Energy data in Gigajoules
qualityid	Integer	O	Optional – if not supplied Quality Id 205 assumed. For Queensland Pipeline CTM Submissions Quality ID : Description

Field name	Field type	M/O/NR	Description
			205 : Normal – Actual Read – PO 206 : Estimated – PO 207 : Substituted – PO

Table 52 - Pipeline CTM Data Format

Trigger	No later than 3½ hours after the beginning of each gas day, each STTM pipeline operator whose STTM pipeline is connected to more than one STTM distribution system at a hub must provide to AEMO the total quantity of natural gas it deems to have been delivered to each custody transfer point where natural gas passes to an STTM distribution system that is not a deemed STTM distribution system for the immediately preceding gas day.
STTM Rules and Procedures Section Reference	STTM Procedures Section 7.2.6
Pre-condition	The pipeline operator must have <ul style="list-style-type: none"> MIRN of all STTM CTPs for the hub
Post-condition	The pipeline operator receives an acknowledgement file.
Variations	<p>This file may be sent with the following file descriptor types:</p> <p>‘CTD’ - Daily File ‘CTU’ – Update File ‘CTP’ – Preliminary File ‘CTF’ – Final File ‘CTR’ – Revision File</p> <p>Any Daily, Update, Preliminary, Final or Revision Allocation file may contain records for one or more gas days. Preliminary, Final and Revision allocations must contain an allocation for each gas day of the billing month. When multiple files are used for allocations, a gas day must not span multiple files.</p> <p>Note: The filename convention limits files to a maximum of 999 rows.</p> <p>Daily Pipeline CTM Data must be sent by 3 ½ hours after the beginning of the gas day, the day after the gas day to which the allocations relate. Updates, Preliminary, Final and Revision allocations must be provided as required in the STTM Rules and Procedures. The STTM Systems will <i>not</i> reject allocation files that are submitted after the time by which the STTM Rules and Procedures require them to be submitted.</p> <p>Multiple allocations of the same allocation type (Daily, Updated, Preliminary, Final, Revision) may be submitted for a given gas day so long as the the hierarchy is maintained i.e.,:</p>

	<p>“Daily” allocations for a given day can be followed by daily, update, preliminary, final or revision allocations for that day.</p> <p>“Update” allocations for a given day must only be followed by update, preliminary, final or revision allocations for that day.</p> <p>“Preliminary” allocations for a given day must only be followed by preliminary, final or revision allocations for that day.</p> <p>“Final” allocations for a given day must only be followed by final or revision allocations for that day.</p> <p>“Revision” allocations for a given day must only be followed by revision allocations for that day.</p> <p>Pipeline CTM data (regardless of whether they are Daily, Updates, Preliminary, Final or Revisions) for a gas day on a facility MUST be submitted and successfully acknowledged by the STTM systems before the corresponding Facility Allocation file is submitted.</p> <p>Note: STTM rules 468, 469 and 473 cover the timing requirements for preliminary, final and revision statements. STTM procedure 7.2.1 covers the requirement for submission of billing period allocations in relation to the timing of the preliminary, final and revision statements.</p>
--	---

Table 53 – Pipeline CTM Data Transaction Context

Field	Validation Name	Event Code	Description
gasdate	Gas date validation	4612	The gas date must be provided in the specified date format : YYYY-MM-DD.
	Gas date validation	4613	The gas date must be in the past.
mirn	MIRN validation	4647	The mirn must be that of an active CTM in the STTM withdrawal zone for the gas day.
consumedenergygj	Consumed energy validation	4648	The consumed energy must be greater than or equal to zero.
	High treshold validation warning	4651	The consumed energy exceeds the high treshold for the MIRN.
	Low treshold validation warning	4652	The consumed energy is below the low threshold for the MIRN.
qualityid	Quality ID validation	4649	Quality id must be valid: 205 : Normal – Actual Read – PO 206 : Estimated – Type 4 – PO 207 : Substituted – Type 4 – PO

Table 54 – Pipeline CTM Data Field Validations

Validation	Event Code	Description
Data Provider	4600	This error code indicates that the Facility Allocation has not been provided by the organisation nominated as the Allocation Agent for the Facility in the STTM.
Mandatory Fields	4611	All mandatory fields for the allocation files must be provided.
Allocation Agent Registration	4615	The company submitting the allocation data must be an active STTM participant for each gas date for which allocation data is submitted by the company.
Allocation Agent	4617	Company submitting allocation data must be the Allocation Agent for the Facility.
MIRN Full List	4650	Pipeline CTM Data file must supply data for the complete set of STTM CTM MIRNs that are active for the gas day on the facility.
Duplicate Allocation	4631	Duplicate Facility Allocation records not permitted.
System Error	4635	System error – Facility Allocation Transaction must be valid.

Table 55 – Pipeline CTM Data Process Validations

2.14 MOS Offers

A Trading Participant (STTM Shipper) may submit MOS Offers to AEMO via a CSV file. AEMO sends the ACK/NACK depending upon the initial validation results. Subsequent validation is performed on the data and a transaction acknowledgement is sent to the Trading Participant.

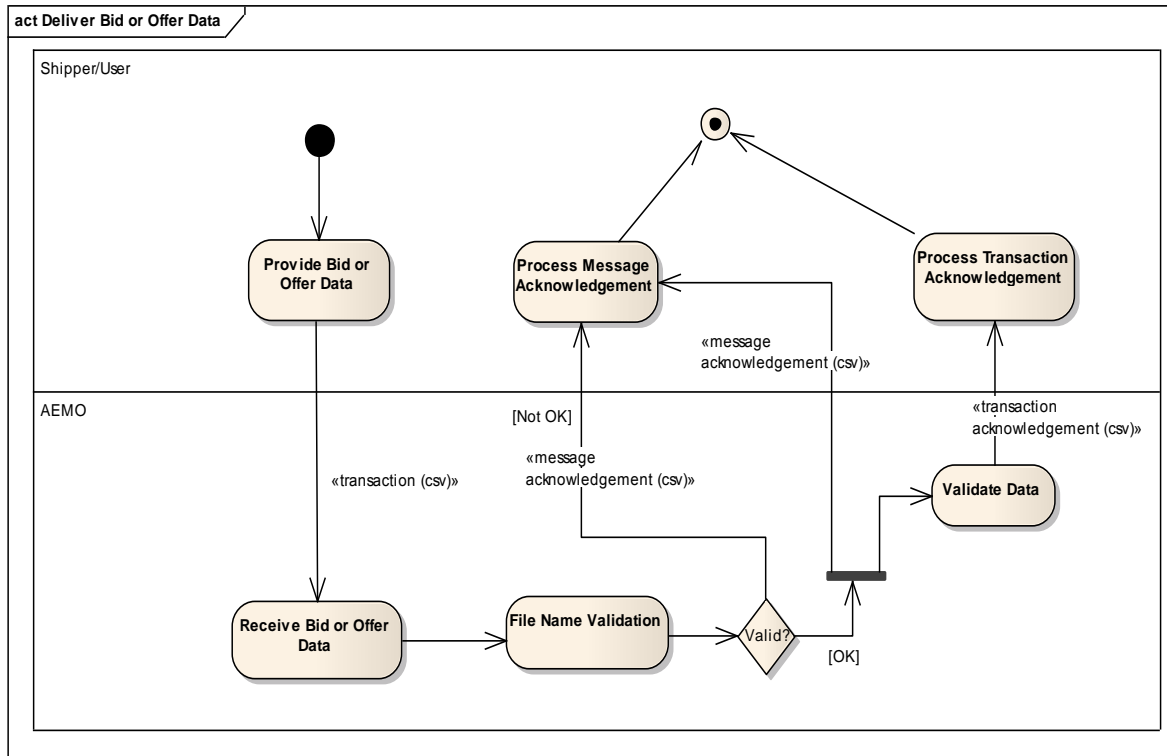


Figure 12 – MOS Offer – Activity Diagram

Field name	M/O/NR	Description
mosperiod	M	The monthly MOS period e.g. Jun UN -2014
facilityid	M	Valid pipeline identifier (e.g. EGP, MAP, MSP,RBP, SEAGAS)
mostype	M	I=Increase, D=Decrease
step01price	M	1st MOS offer step price (Ascending)
step01quantity	M	1st MOS offer step quantity
step01trn	M	1st MOS offer step trading right
step02price	O	2nd MOS offer step price
step02quantity	O	2nd MOS offer step quantity
step02trn	O	2nd MOS offer step trading right
step03price	O	3rd MOS offer step price
step03quantity	O	3rd MOS offer step quantity
step03trn	O	3rd MOS offer step trading right
step04price	O	4th MOS offer step price
step04quantity	O	4th MOS offer step quantity
step04trn	O	4th MOS offer step trading right
step05price	O	5th MOS offer step price
step05quantity	O	5th MOS offer step quantity
step05trn	O	5th MOS offer step trading right

<i>Field name</i>	<i>M/O/NR</i>	<i>Description</i>
step06price	O	6th MOS offer step price
step06quantity	O	6th MOS offer step quantity
step06trn	O	6th MOS offer step trading right
step07price	O	7th MOS offer step price
step07quantity	O	7th MOS offer step quantity
step07trn	O	7th MOS offer step trading right
step08price	O	8th MOS offer step price
step08quantity	O	8th MOS offer step quantity
step08trn	O	8th MOS offer step trading right
step09price	O	9th MOS offer step price.
step09quantity	O	9th MOS offer step quantity
step09trn	O	9th MOS offer step trading right
step10price	O	10th MOS offer step price.
step10quantity	O	10th MOS offer step quantity
step10trn	O	10th MOS offer step trading right

Table 56 – MOS Offer Data Format

Trigger	This transaction is initiated by a Trading Participant, who is a STTM Shipper , when they intend to offer for MOS (Increase or Decrease) in the STTM.
STTM Rules Section Reference	400
Pre-condition	The Trading Participant must hold valid MOS enabled Trading Right(s) on a Pipeline for the entire MOS period for which the MOS offer is to be submitted, and must have decided the type (Increase and/or Decrease) price (\$/GJ) and quantities (GJ) of MOS for each trading right they intend to offer for the MOS Period.
Post-condition	The STTM Participant's submitted MOS offer is validated and stored in the STTM systems for use in MOS allocations and settlements.

Table 57 – MOS Offer Transaction Context

Field	Validation Name	Event Code	Description
mosperiod	MOS period validation	4751	MOS period is mandatory
		4760	MOS period must be for a future monthly MOS Period
		4769	MOS period must be in MmmMM-YYYY format.

Field	Validation Name	Event Code	Description
			<u>where 'Mmm' indicates the first three characters of the month ('M' represents an uppercase character and 'm' represents a lowercase character)</u>
	MOS cut off validation	4753	The MOS Offer must be submitted by no later than Y pm EST on the gas date X days before before the start of the MOS Period
facilityid	Facility validation	4750	Facility Id is mandatory
		4763	MOS Offers must be submitted against valid pipelines
mostype	MOS type validation	4754	MOS Type must be 'I' (Increase) or 'D' (decrease)
step(n)price	Step price validation	4759	MOS Price must increase with increasing offer step
		4761	MOS Price must be \geq Minimum Market Price and \leq MOS Cost Cap
		4762	MOS Prices (\$/GJ) may be entered up to a maximum of four decimal places
step(n) quantity	Step quantity validation	4758	Step Quantity must be greater than or equal to 0 Step Quantity must not have any decimal places
trn	Trading right / pipeline validation	4765	Trading Rights in a MOS Offer can only be for one pipeline
	trading right validation	4766	The effective date range of the Trading Right must overlap the entire MOS Period date range
		4767	The Trading Right must be an active MOS enabled trading right for every gas day in the MOS Period
		4770	The submitting Trading Participant is the Trading Right Holder for each Trading Right

Table 58 – MOS Offer Field Validations

Validation	Event Code	Description
Price\Quantity\TRN validation	4756	The first Price\Quantity\TRN step must have non-null values.
Contiguous Steps	4757	Step Price\Quantity\TRN values must be contiguous.
Suspended STTM Shipper	4768	Trading Participant who is suspended as STTM Shipper at a hub must not submit a Decrease MOS Offer at that hub.
Single MOS Offer per file	4008	Only one MOS offer (for TP for Pipeline for MOS Type for a MOS period) is allowed per file.

Table 59 – MOS Offer Process Validations