Gas Industry Company Limited Allocation Agent Functional Specification

Version 2.9

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Revision History

Version	Release date	Author	Description
0.1	15 th July 2008	Maria Sydor Craftware Computing Limited	Initial Draft
0.2	21 st July 2008	Maria Sydor	 Corrections made to: interpretation of rule 39 (GAS020), remove references to invoicing, include Gas Registry interface for Gas Gate reference data, add that parent distributor is responsible for providing injection volumes for attached embedded networks, the calculation of AUFG to include embedded network consumption, the outputs to TSOs to include embedded network consumption, TSO interfaces to include translation tables for gas gates and allocation participants, Estimation algorithm included.
			Comments from M-co.
0.3	31 st July 2008	Maria Sydor	 Comments from users: Removal of embedded network processing Removal of allocation group in retailer trader information and update of retailer permissions Removal of agents. Sender in header optional and not validated by system. GAP090 seasonality factor added to daily average calculation GAR040, 50 and 30 removed allocation group and profile. Added contract ID to GAR010 GAR080 time lag included for annual consumption GAR100 changed Removed allocation group from aggregation level in GAR110 Rationalisation of decimal format for outputs to numeric 10.3 – consistent with OATIS Removal of invoicing Additional clarification/formatting/standardisation of terminology Removal of consumption period in headers in all examples Addition of exception processes at various stages when submissions are missing for

			 allocation groups 3 to 6. Clarification added to the Contract Matching algorithm making it clear that the system will not pick up Contract IDs from other retailers.
0.4	7 th August 2008	Phillip Beardmore	 Incorporation of further comments from M-co and industry stakeholders Inclusion of exception process for contract ID matching algorithm Inclusion of period during a month when OATIS is not to be updated Clarification that retailers submit their historic estimate reports via GAS040, GAS050 and GAS060 GAP020 clarified to state that seasonality factor is to be applied to all allocation groups Clarification of when distributors receive information approved for release by retailers Editorial review.
0.5	8 th August 2008	Phillip Beardmore	 Clarification that retailers submit consumption information at either the gas gate level or the notional delivery point level Clarification that TSOs receive initial, interim and final allocation information Updating rule references Editorial review.
0.6	18 th August 2008	Maria Sydor and Phillip Beardmore	 Allowance made for direct consumers where consumption information may or may not be submitted and for unmetered gas gates where injection information will not be provided Provision made to prevent information being published on the public website of information relating to gas gates that have been given an exemption by Gas Industry Co Include an additional attribute of metering type against a gas gate – to be able to accommodate unmetered gas gates Corrections to GAR110 relating to the treatment of estimates in relation to the quantity of historical estimates.
0.7	19 th August 2008	Phillip Beardmore	 Reinsertion of 'Allocation Group' field in the GAR010, GAR020, GAR030 reports.
1.0	20 th Aug 08	Phillip Beardmore	Contractual baseline.
2.0	31 st Oct 08	Phillip Beardmore	 Various clarifications following system testing and user acceptance testing.
2.1	31 st May 2009	Phillip Beardmore	• Incorporation of change requests 2, 4, 5 and 6.

		and Maria Sydor	
2.2	16 th November 2012	Andrew Walker and Kate Turner	 Incorporation of all change requests up to CR11 Various clarifications and corrections to system processes Updating of rule and exemption references following minor changes to the Rules in 2009
2.3	1 st March 2013	Andrew Walker and Kate Turner	 Draft baseline following 2013 rule amendments Changes to several processes New process GAU035 for determining G1M gas gates
2.4	4 th June 2013	Zane Doran	Update to the GAP100 process.
2.5	13 th June 2013	Zane Doran	• Further update to the GAP100 process.
2.6	July 2013	Maria Sydor	 Various suggested changes and improvements arising from auditor's review of document.
2.7	1 st February 2016	Ed Oosterbaan	 Update to include NEW GAR180, GAR190 and GAR130a reports
2.8	1 st February 2017	Ed Oosterbaan	References to Vector/First Gas
2.9	20 th July 2019	Ed Oosterbaan	 Update to include NEW GAR170b and GAR180b reports Update to 8.3 diagram Correction to GAR180 consumption period format. YYYYMM

Glossary

The terms used in this document have the same definitions as the matching terms in the Gas (Downstream Reconciliation) Rules 2008.

Specific OATIS terminology is explained within the specific processes GAS030 and GAR130.

Contents

1.	Executive Summary	9	
2.	Background	10	
3.	Allocation Agent System Overview	11	
4.	Participants of the system	12	
4.1	Allocation participants		12
4.2	Industry body		12
4.3	Gas registry		12
5.	Submission information	13	
5.1	Allocation groups		13
5.2	Profile code		13
5.3	Profile type		14
5.4	Gas gate code		14
5.5	Network code		17
5.6	Contract identifier		18
6.	Allocation process	18	
7.	Data transfer requirements	19	
7.1	Calendar view of allocation process		19
7.2	File naming convention		21
7.3	File headers		22
7.4	System interfaces		22
7.5	Rounding of numbers		22
8.	Reconciliation process maps	24	
8.1	Accept and validate submissions		24
8.2	Allocate UFG		25
8.3	Generate reports		26
8.4	Maintain data		27

9. Sub-processes

28

GAS010 Receive reference information from Gas Industry Co

28

GAS020 Receive allocation participant notifications	30
GAS030 Receive gas gate injection quantities	34
GAS040 Receive monthly submissions	39
GAS050 Receive daily ICP submissions	42
GAS060 Receive daily submissions for dynamic deemed profiles	46
GAS070 Receive as-billed information	49
GAS080 Receive meter reading frequency information	52
GAP010 Calculate AUFG factors	55
GAP020 Classify allocated gas gates	57
GAP030 Determine consumption period and stage	59
GAP040 Check for completeness and estimate missing data	60
GAP050 Apply AUFG factors to allocation groups 1 & 2 of all gas gates	64
GAP060 Calculate G1M MUFG factors	66
GAP070 Apply G1M MUFG factors to allocation groups 1, 2, 3 & 5	68
GAP080 Calculate MUFG factors for all gas gates	70
GAP090 Apply MUFG factors to standard gas gates in allocation groups 3 & 5	72
GAP100 Calculate the gas gate residual profile	74
GAP110 Profile allocation groups 4 & 6 and apply MUFG factors	76
GAP120 Recalculate mismatched allocated quantities	78
GAP130 Calculate the daily average consumption per ICP	82
GAR010 Report daily retailer allocation and UFG	84
GAR020 Report monthly retailer allocation and UFG	87
GAR030 Report annual retailer allocation and UFG	90
GAR040 Report gas gate residual profile shapes	93
GAR050 Report initial versus final consumption comparison	96
GAR060 Report seasonal adjustment daily shape values	99
GAR070 Report summary UFG and retailer allocation	102
GAR080 Report billed versus consumption comparison	105
GAR090 Report annual UFG factors & G1M gas gates	108
GAR100 Report meter reading frequency compliance	111
GAR110 Report percentage of historical estimates	114
GAR120 Report incidents	117
GAR130 Report allocation information to TSOs	118
GAR130a Allocation information for TSOs	121
GAR140 Provide gas gate information	123
GAR150 Report gas gates with changed allocations	125
GAR160 Report summary allocated quantities	127

GAR170 Report summary submissions	129
GAR170b Report summary submissions to TSOs	132
GAR180 Report daily allocation information to industry body	134
GAR180b Report daily allocation information to TSOs	136
GAR190 Report daily submission information to industry body	138
GAM010 Maintain reference data	140
GAM020 Maintain register of profiles	142

1. Executive Summary

This functional specification details the requirements of the system to be developed and operated by the service provider – the allocation agent – for the downstream reconciliation and allocation of gas.

This document has been developed using the following sources:

- Gas (Downstream Reconciliation) Rules 2008 ('the Rules'),
- Gas Governance (Compliance) Regulations 2008,
- RFP Appointment of an allocation agent for the provision of services for downstream reconciliation and allocation of gas,
- The allocation agent service provider agreement,
- Information exchange file formats notice v1.2 issued 3 November 2008,
- File formats working party, industry experts, Gas Industry Company Limited project team and Phillip Beardmore of Strata Energy.

If there is any conflict between this document and the Rules, or any notice or decision made under the Rules, the Rules (or the notice or decision) shall take precedence and prevail.

2. Background

The purpose of the downstream reconciliation and allocation system is to take submission information supplied by the allocation participants and use it to determine unaccounted for gas (UFG), then allocate that to the allocation participants and provide reports to all interested parties.

The system must enable the allocation agent to perform the responsibilities defined in the Rules, which include:

- calculating the annual UFG factor for the next gas year;
- checking that the required submission information is complete and accurate;
- estimating for missing submissions;
- determining the UFG at each gas gate and allocating this to retailers by:
 - applying the annual UFG factor,
 - \circ $\,$ calculating and applying the monthly UFG factor,
 - \circ $\;$ determining the gas gate residual profile, and
 - profiling monthly submissions into daily quantities using the gas gate residual profile and applying the monthly UFG factor to them;
- producing allocation and compliance reports to allocation participants and the industry body – Gas Industry Company Limited; and
- approving profiles and maintaining a register of approved profiles.

All invoicing functions required to be performed by the allocation agent are deemed to be external to the system described in this document.

3. Allocation Agent System Overview



4. Participants of the system

4.1 Allocation participants

The Rules define allocation participants as retailers, distributors, meter owners or transmission system owners. This specification only deals with retailers, distributors and transmission system owners; meter owners do not have any obligations to provide or receive information in respect of the allocation process.

Retailers are required to provide submission information to the allocation agent and receive allocation information and other reports from the system.

Transmission system owners (TSOs) own the transmission system supplying gas to consumer installations via gas gates. TSOs provide injection volume information to the allocation agent and receive allocation information from the allocation agent.

Any new TSO will be expected to provide information in the formats currently defined for OATIS.

Distributors provide information pertaining to the creation and decommissioning of gas gates.

Distributors are also able to receive allocation information relating to their own distribution systems but only for those retailers who have consented to the allocation agent releasing their information to specific distributors.

4.2 Industry body

The industry body is the Gas Industry Company Limited (Gas Industry Co), which approves new allocation participants and codes for use in the allocation system. The allocation agent is required to provide Gas Industry Co with compliance reports.

4.3 Gas registry

The gas registry is provided by the registry operator, Jade Software Corporation (NZ) Limited. It is the authoritative database of ICP information. The gas registry generates monthly reports for the allocation agent containing gas gate trading information.

5. Submission information

Submission information is provided in three separate formats. The specific format is dependent on the allocation group.

5.1 Allocation groups

There are six allocation groups, which are defined in the Rules as follows:

Allocation Group	Definition	Submissions aggregated
1	Assigned to ICPs that have a TOU meter with telemetry and where actual gas quantities are recorded daily.	Per ICP per day
2	Assigned to ICPs that have a TOU meter without telemetry and where actual gas quantities are recorded daily.	Per ICP per day
3	Assigned to ICPs where the daily gas quantities are determined by application of an approved static deemed profile (by the retailer) to monthly gas quantities taken from register readings that are required under rule 29 to be recorded monthly.	Per ICP per day
4	Assigned to ICPs where the daily gas quantities are determined by application of the gas gate residual profile (by the allocation system) to monthly gas quantities taken from register readings that are required under rule 29 to be recorded monthly.	Monthly
5	Assigned to ICPs where the daily gas quantities are determined by application of an approved dynamic deemed profile (by the retailer) to monthly gas quantities taken from register readings that are not required under rule 29 to be recorded monthly.	Daily
6	Assigned to ICPs where the daily gas quantities are determined by application of the gas gate residual profile (by the allocation system) to monthly gas quantities taken from register readings that are not required under rule 29 to be recorded monthly.	Monthly

5.2 Profile code

A profile code of four characters is provided in submissions to indicate which approved profile was used to profile the consumption information or that there was no profile (XTOU), or that the system is required to profile using the gas gate residual profile (GGRP).

Profiling is a process whereby a single quantity for a period such as a month is divided into days in a manner that maintains a pre-defined pattern (profile) of quantities over time. The pattern is defined either as a static deemed profile, a dynamic deemed profile or calculated from the gas gate residual profile. The allocation agent is required to calculate the gas gate residual profile and apply it to submissions of allocation groups 4 and 6 only.

Retailers will provide ready-profiled submissions for allocation groups 3 and 5. For allocation groups 1 and 2 there are no profiles as daily values are recorded by the meter; these submissions will have the profile code of XTOU.

5.3 Profile type

There are four types of profile:

Profile	Profile code
Static deemed profile	Sxxx
Dynamic deemed profile	Dxxx
Gas gate residual profile	GGRP
None, i.e. time of use (TOU) meter	ХТОО

It should be noted that static deemed profiles and dynamic deemed profiles must be approved and registered by the allocation agent in accordance with the Rules before they can be applied in the allocation process.

5.4 Gas gate code

This is a code (8 characters) that identifies the gas gate. Types of gas gate are as follows:

Туре	Allocation agent code	Description	Allocated/not allocated
Gas gate connected network	GN	Point of connection between the transmission system and a distribution system	Allocated (unless part of a notional delivery point)
Notional delivery point	ND	Point of connection between the transmission system and a distribution system that represents a group of gas gates	Allocated
Embedded network gas gate	EN	Point of connection between two distribution systems including a point of connection between a distribution system and an embedded network distribution system	Allocated at parent gas gate
Direct connect gas gate	GD	Point of connection between the transmission system and a consumer installation	Not allocated

Notional Delivery Point

Under the Rules, groups of gas gates (notional delivery points) can be determined by Gas Industry Co to be treated as a single gas gate for the purpose of the allocation process. Submissions by retailers at these gas gates may be aggregated and submitted at the notional delivery point – or at the individual gas gates that make up the notional delivery point. The allocation agent's system will aggregate any submissions provided at the individual gas gates of notional delivery points. Allocation results will only be provided at the notional delivery point.

With respect to injection volumes, TSOs will provide quantities at the individual gas gates and/or at the notional delivery point and the system will aggregate to the notional delivery point level.

Interconnection points

For both embedded network connection points and other interconnection points, the two distribution systems will be merged under a single notional delivery point. In consultation with Gas Industry Co this notional delivery point will be assigned to only one network code even though the individual gas gates may have different network codes. Submissions for consumer installations in embedded networks will be made at the EN gas gate.

N.B. There is no embedded generation involved in the allocation process.

Gas gates

All gas gates are classified as either direct connect gas gates or allocated gas gates.

Direct connect gas gates

Direct connect gas gates generally have only one consumer at the gas gate. Injection volumes may be provided by the responsible TSO; however, retailers are not required to supply consumption information for these gas gates. Direct connect gas gates are not allocated, although in the case that their injection volumes are supplied, they may be published.

Allocated gas gates

Allocated gas gates are all gas gates that are not direct connect gas gates. They are further classified as either standard gas gates or global 1 month (G1M) gas gates.

Standard gas gates

Standard gas gates are allocated gas gates that are not G1M gas gates.

Global 1-month UFG methodology (G1M) gas gates

Gas gates with a high percentage of TOU load often exhibit volatility in MUFG, due to the sensitivity of their residual profile with respect to TOU consumption. This can result in non-TOU load absorbing significant volumes of UFG. G1M gas gates are allocated according to the G1M allocation methodology in place of the global allocation methodology, allocating UFG to all allocation groups using the G1M MUFG factor. This ensures UFG is allocated proportionately to consumption volumes submitted.

G1M gas gates are determined by the allocation agent before the beginning of the gas year and the criteria are based on percentage TOU load and whether or not the MUFG factor has breached certain thresholds, within the 12 months up to and including the February of the previous gas year.

Unmetered gas gates

Where an allocated gas gate is unmetered, no injection quantities will be submitted to the allocation agent by TSOs.

Oversized metered gas gates

Oversized metered gas gates are allocated gas gates at which the volume of gas delivered at the gas gate falls below the minimum flow rate able to be measured by the existing meters.

For unmetered and oversized metered gas gates the only submissions will be consumption information submitted by retailers. The allocation process uses the total consumption quantity (i.e. the sum of all retailers' consumption information submissions) as the injection quantity for allocation purposes.



5.5 Network code

This is the code (4 characters) of the distributor for the distribution system connecting consumer installations with the gas gate. There is only one network code for each gas gate.

Where there is a connection between a distribution system and an embedded network (EN), there will be a metered interconnection point (EN gas gate). An EN gas gate is to be included within a notional delivery point. Even though the parent distribution system gas gate and the embedded network gas gate may have different network codes, this notional delivery point will be assigned to only one network code – the parent distribution system network code.

The volume (injection quantities) for this notional delivery point will be the injection quantities for the parent distribution system gas gate provided by the TSO of the parent distribution system.



For direct connect gas gates the network code is the TSO code.

5.6 Contract identifier

The contract identifier (contract ID) is assigned by TSOs to their gas transmission contracts with retailers. Although currently a length of 4 characters is used for contract IDs, the contract ID in the allocation system will have a maximum length of 8 characters to allow for future expansion.

The interface (via OATIS) requires that the allocation information provided by the allocation system includes a contract ID. The allocation system will assign a contract ID from the contract information provided to the allocation agent as part of the trader information provision (in GAS020).

6. Allocation process

The allocation process involves:

- the calculation of an annual UFG factor for every allocated gas gate. This is applied to consumption information submitted for allocation groups 1 and 2 at allocated gas gates (excluding G1M gas gates) during the applicable gas year;
- the calculation of a monthly UFG factor for every allocated gas gate. This is applied to consumption information submitted for the remaining allocation groups 3, 4, 5 and 6 at allocated gas gates (excluding G1M gas gates);
- the calculation of a G1M monthly UFG factor for every G1M gas gate. This is applied to consumption information submitted for all allocation groups at G1M gas gates; and
- a scaling process where the above steps do not result in allocated quantities that equate to the daily injection for a gas gate.

The gas gates referred to above are the notional delivery point gas gates and the single gas gates that are not amalgamated into notional delivery points.

All reporting of allocated quantities is provided at the gas gate where allocation takes place.

7. Data transfer requirements

7.1 Calendar view of allocation process

The following table outlines the prescribed timelines which must be managed and adhered to by allocation participants and the allocation agent.

Business day of month	Description	Notes
1	By 0900: Gas Registry notifies the allocation agent of any changes to retailer trading information - commencement and cessation of trade at a gas gate (rule 39.3)	PR-220
3	Retailers notify allocation agent of any changes to retailer trading information – changes to gas transmission contract information (rule 39) Allocation agent should forward the above contract notification to the relevant TSO.	GAS020
4	By 1200: Retailers provide initial allocation information to allocation agent (rule 31) including proportion of historical estimates (rule 40.1)	GAS040, GAS050 and GAS060
	By 1200: TSOs provide daily injection quantities for previous month for all allocated gas gates (rule 41.1)	GAS030
5	By 1200: Allocation agent performs initial allocation, publishes applicable monthly UFG factors and provides reports (rules 46.4.1 & 48.2)	GAP030-GAP130, GAR010-GAR040, GAR160, GAR170, GAR180 & GAR190
	By 1200: Allocation agent provides to retailers and Gas Industry Co a report on the accuracy of consumption information between initial and final allocation (rule 53.3)	GAR050
	By 1200: Allocation agent provides its monthly self- review for the previous reconciliation month, to the Gas Industry Co (AA SPA Schedule 3 3.7)	
	First Gas downloads the published report on initial allocation information to TSOs. First Gas uploads to OATIS when appropriate.	GAR130
6	By 1200: Allocation agent publishes seasonal adjustment daily shape values (rule 53.1) on the website ¹ .	GAR060
	By 1200: Allocation agent publishes summary allocation statistics: gas gate injection, retailer allocated quantities and gas gate UFG (rule 53.2) ²	GAR070

¹ Though the Rules require publication no later than 1 business day after the allocation, the GAR060 is typically published at the same as the allocation results ² This report is published on the date specified in rule 46.4.1. Accordingly the information required by rule 53.2

will also be published in this report on this date (i.e. in advance of the timeframe specified in rule 53.2)

Business day of month	Description	Notes
	By 1730: Allocation agent can amend initial allocation up to this time, if published on business day 5 (rule 44.3)	
9	By 0800: Retailers provide interim allocation information to allocation agent (rule 32) including proportion of historical estimates (rule 40.1)	GAS040, GAS050 and GAS060
	By 0800: TSOs provide daily injection quantities for interim allocation for all allocated gas gates (rule 41.2)	GAS030
10	By 1200: Retailers provide allocation agent with Meter Reading Frequency report (rule 40.2)	GAS080
11	By 0800: Allocation agent performs interim allocation, publishes applicable monthly UFG factors and provides reports (rules 46.4.1 & 49.2)	GAP030- GAP130, GAR010-GAR040, GAR130 ³ , GAR150, GAR170, GAR180 & GAR190
	By 0800: Retailers provide as-billed information by gas gate (rule 52.2.1).	GAS070
	By 1730: Allocation agent can amend interim allocation up to this time, if published on business day 10 (rule 44.3).	
12	By 0800: Allocation agent publishes seasonal adjustment daily shape values (rule 53.1) on the website ⁴	GAR060
	By 0800: Allocation agent publishes summary allocation statistics: gas gate injection, retailer allocated quantities and gas gate UFG (rule 53.2) ⁵	GAR070
13	By 1700: Allocation agent must run the report comparing "as-billed" information and consumption information (rule 52.2.2).	GAR080
14	By 0800: Retailers provide final allocation information to allocation agent (rule 33) including proportion of historical estimates (rule 40.1)	GAS040, GAS050 and GAS060
	By 0800: TSOs provide daily injection quantities for interim allocation for all allocated gas gates (rule 41.2)	GAS030
	By 0800: Allocation agent publishes comparison of retailer as-billed information and consumption information (rule 52.2.3).	GAR080
16	By 0800: Allocation agent performs final allocation, publishes the applicable monthly UFG factors and provides reports to retailers (rules 46.4.1 & 50.2)	GAP030- GAP130, GAR010-GAR040,

³ Note that First Gas downloads the published report on interim allocation information to TSOs. First Gas uploads to OATIS when appropriate. ⁴ As per footnotes for business day 6 ⁵ As per footnotes for business day 6

Business day of month	Description	Notes
	By 1730: Allocation agent can amend final allocation up to this time, if published on business day 15 (rule 44.3).	GAR130 ⁶ , GAR150, GAR170, GAR180 & GAR190
17	By 0800: Allocation agent publishes seasonal adjustment daily shape values (rule 53.1) on the website ⁷	GAR060
	By 0800: Allocation agent publishes summary allocation statistics: gas gate injection, retailer allocated quantities and gas gate UFG (rule 53.2) ⁸	GAR070
Last	Allocation agent provides Gas Industry Co with a Meter Reading Frequency report.	GAR100
	Allocation agent prepares self-review (rules 12 & 13).	

7.2 File naming convention

In submitting information to the allocation agent in accordance with the proposed file formats, the following file naming convention is to be used, unless otherwise specified by Gas Industry Co:

sender + utility type + recipient + file type + month (or last month) to which report/consumption applies + report run date + uniqueID# (e.g. hhmmss run time, or ICP, but limited to Char(60))

with an extension of .TXT and with the components concatenated using the underscore character, to assist readability:

e.g. SENA_G_ALLA_GAS040_200810_20081105_123456.TXT

[Char4_Char1_Char4_ Char6_yyyymm_yyyymmdd_uniqueID.TXT]

The 'file type' portion of the file name (e.g. GAS040) is defined as part of the file header definition in the proposed file formats.

The first record of a file contains header information followed by zero or more detail lines, as detailed in the attached file formats.

⁶ Note that First Gas downloads the published report on final allocation information to TSOs. First Gas uploads to OATIS when appropriate.

 $^{^7\}mathrm{As}$ per footnotes for business day 6

⁸ As per footnotes for business day 6

7.3 File headers

There is a standard file header defined in the file formats document for both inputs and outputs, except for interfaces to and from OATIS: i.e. GAS030, GAR130 and GAR150.

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	Μ	Process map name of report e.g. "GAR110".
Sender	Char (4)	M/O	"ALLA" if being sent by allocation agent otherwise optional. Not validated by system.
Allocation Participant	Char (4)	Μ	Participant code of retailer to whom the information relates. If more than one allocation participants' data exists in the file (in outputs only) then use a general code of "APAR".
Recipient	Char (4)	Μ	"ALLA" if being sent to allocation agent or the code of the allocation participant to whom the information is being sent e.g. retailer, distributor or TSO or "GICX" if to Gas Industry Co or "GASW" if published on the website.
Report Run Date	DD/MM/YYYY	М	Date the report is created.
Report Run Time	HH:MM:SS	М	Time the report is created.
Number of Records	Num (6)	М	Total number of detail records in report.

7.4 System interfaces

The allocation agent is required to provide the following types of interfaces:

- A secure browser-based interface that allows participants to upload submission information into the allocation system and to download reports (i.e. online interface);
- A secure file transfer facility that will allow participants to automate their data submission and report downloading processes (anticipated future requirement);
- A secure interface with the Gas Registry (future requirement);
- Public website that will allow for the publication of information to the general public.

7.5 Rounding of numbers

Where numeric values contained in GAR outputs are used by the allocation system in subsequent processes (i.e. the allocated GJ in GAR010; the gas gate

residual profile in GAR040; the AUFG and MUFG factors in GAR070), the system shall use the level of accuracy contained in the reports as the level of accuracy inputted into the subsequent process or processes (i.e. the aggregated GAR020 and GAR030 quantities will sum the 3 decimal place inputs from GAR010; the AUFG factor calculated in GAP010 will be 4 decimal places; the MUFG factor calculated in GAP080 and the G1M MUFG factor calculated in GAP060will be 6 decimal places; the gas gate residual profile calculated in GAP100 will be 3 decimal places). In all other instances, the system shall use the number of decimal places contained in its specification.

8. Reconciliation process maps

8.1 Accept and validate submissions



8.2 Allocate UFG



8.3 Generate reports



8.4 Maintain data



9. Sub-processes

Sub-process:	GAS010 Receive reference information from Gas Industry Co
Process:	Accept industry body information
Source:	Gas Industry Co
Rule references:	5, 25A, 25B, 25C
Dependencies:	

Description:

Gas Industry Co approves codes and other reference information for use in the allocation process, which are then provided to the allocation agent.

Business requirements:

- 1. The allocation agent must accept and store the following codes and other reference information approved by Gas Industry Co:
 - allocation participants (with roles of retailer, distributor and TSO);
 - file formats;
 - non-business days;
 - gas years with their start date and end date;
 - valid gas gate codes together with their gas gate type, network code, TSO code, parent gas gate of embedded networks, metering type (unmetered or metered) and whether publication on the public website has been exempted;
 - the grouping of gas gates into valid notional delivery points;
 - the 4 month and 12 month meter reading frequency percentage thresholds;
 - the percentage of error for the accuracy of consumption information provided for initial allocation;
 - direct connect gas gates;
 - unmetered gas gates;
 - oversized metered gas gates; and
 - G1M criteria
- 2. The allocation agent must use the latest approved codes and other reference information for the relevant time periods.

Data inputs:

One or more of the following codes and other reference information with a description and effective start and end dates:

- retailers 4 characters;
- distributors 4 characters;
- TSOs 4 characters;
- non-business days per year;
- gas gates (including direct connects, unmetered and oversized metered);

- gas years;
- the grouping of gas gates into valid notional delivery points the notional delivery point is in the same format as the gas gate code;
- 4 month and 12 month meter reading frequency percentage thresholds;
- percentage of error for the accuracy of consumption information provided for initial allocation; and
- G1M criteria

Processing:

The allocation agent:

- validates and stores the codes and other reference information in the reference data tables;
- creates a full audit trail entry.

Outputs:

Updated reference tables and audit trail entry.

Sub-process:	GAS020 Receive allocation participant notifications
Process:	Accept trading information
Source:	Retailers, distributors, TSOs and gas registry
Rule references:	39
Dependencies:	

Description:

Allocation participants and the gas registry must supply the allocation agent with gas gate and trader information so that allocated gas volumes at gas gates can be correctly assigned to retailers' transmission service agreements.

- Information from allocation participants must be supplied to the allocation agent no later than 1200 hours on the 3rd business day of the month following the consumption period in which the event occurred.
- Information from the gas registry must be supplied to the allocation agent no later than 0900 hours on the 1st business day of the month.
- 3. Allocation participants are only required to provide updates to trader information where it concerns consumption under a supplementary (GG2 or ICP3) agreement. Changes to trading associated with a retailer's default contract ID (STD1) will be derived from information supplied by the registry operator.
- 4. For maintenance of gas gate information see GAR140 for further details.

Retailer trader information

Gas Transmission Contract Information

In order for the allocation agent to accurately report to the TSO on the allocated quantities assigned to each gas transmission contract ID, retailers are required to provide the contract ID of their relevant transmission services agreement (TSA) and the commencement and expiry dates. For each retailer there must be one contract ID which covers all gas gates at which that retailer is supplying gas (the STD1 default contract ID). Contract IDs can commence mid-month for new retailers and expire mid-month when retailers cease to supply gas at a gas gate. Otherwise, changes to contract IDs (for administrative purposes) should have a commencement date of the first calendar day of the month (i.e. consumption period) only and a cessation date of the last calendar day of the month only.

Where retailers have supplementary gas transmission contracts (supplementary agreements GG2 and ICP3⁹) or non-VTC¹⁰ TSA gas transmission contracts (non-VTC TSAs), they must also provide and notify (and keep up to date) the following information for each such contract:

- contract ID with the commencement and expiry dates; and either
- a list of ICPs for which the (ICP3) contract ID applies; or
- a list of gas gates (including notional delivery points) for which the (GG2) contract ID applies.

A retailer cannot have more than one ICP3 contract ID assigned to a single ICP, nor can it have more than one GG2 contract ID assigned to a single gas gate.

⁹ Gas gate and ICP supplementary contract IDs, respectively

¹⁰ Vector Transmission Code

Retailers are required to be aware that information for non-VTC TSA contract IDs and supplementary agreement contract IDs must be updated to exclude/include ICPs switched to/from other retailers since the last notification.

The allocation agent is to check a retailer's contract IDs against the trader information provided to the allocation agent by TSOs.

In effect, there will be a maximum of 3 levels of contract ID information held per retailer:

Level 1 – Default contract ID (VTC compliant TSA)¹¹;

Level 2 – Gas gate contracts (supplementary agreements and non-VTC TSAs);

Level 3 – ICP contracts (supplementary agreements and non-VTC TSAs).

Contract ID Matching Algorithm of Submissions

Contract ID matching of a retailer's submission for a gas gate will commence at the lowest level of contract ID (level 3) and work up to the default contract ID (level 1). For each submission, the allocation system will attempt to find a matching retailer contract ID (level 3) first by using the submission's retailer code and ICP number (if exists in the submission), then if no match is found the system will search the level 2 contract IDs by using the retailer code and gas gate of the submission. If neither of these finds a matching contract ID then the system will use the retailer's VTC compliant TSA contract ID (for the applicable dates). Only contract IDs relating to the retailer of the submission will be assigned to a retailer's submission.

If a submission is assigned a contract ID that is later rejected by OATIS this will be mainly because the retailer has not notified the allocation agent that the contract has ceased.

Retailer/Gas Gate

Retailers must give notice to the allocation agent when they:

- commence to supply gas under a non-default contract ID to a consumer installation at an allocated gas gate at which they have not previously supplied gas under that non-default contract; or
- cease to supply gas at an allocated gas gate under a non-default contract.

Where a retailer commences supply at an allocated gas gate, that retailer must advise the allocation agent as to whether the consumption information will be submitted at the individual gas gate level or at the notional delivery point level. This advice must be given by the retailer in respect of trading under both default and non-default contract IDs, i.e. whether the trading notification is supplied from the registry or directly by the retailer.

The retailer must supply its as-billed information (refer GAS070) at the same level as its consumption information (i.e. if a retailer provides its consumption information submissions at the notional delivery point level, then that retailer is to provide its asbilled information at the notional delivery point level). This retailer information is to be used by the allocation agent to validate retailer submissions and to estimate missing submissions.

Retailer participant code / Shipper ID

Retailers are also required to provide any translations between their retailer allocation participant codes and their Shipper IDs, if they are different. This translation table will also be the mechanism used to amalgamate a retailer's allocation information into single codes required by the TSO for billing purposes.

Retailer allocation information access to distributors

Each retailer has the right to permit distributors to receive that retailer's allocation reports – GAR010, GAR020, GAR030, GAR040 and GAR050. Each retailer will provide

¹¹ This acts as a 'catch-all" for retailer consumption that is not assigned to a valid supplementary agreement or non-VTC TSA.

the allocation agent with permission for distributors to receive these reports. Permission to be per distributor. The default will be no access.

Transmission system owner trader information

TSOs are required to provide the allocation agent with details of the gas gates for which they will be providing injection information and for which they will be requiring allocation information. TSOs are only required to provide injection information for allocated gas gates (except unmetered and oversized metered gas gates) but must provide *access* to injection information for direct connect gas gates. The allocation agent will calculate the injection quantities of unmetered and oversized metered gas gates by using the total consumption submitted by the retailers at these gas gates.

With each allocated gas gate, TSOs will be required to provide: the network owner of each gas gate and any translation information the system needs to convert gas gates to Welded Point IDs, if they are different. This translation will be used by the allocation system not just for translating codes but also for aggregating allocation information of multiple gas gates into one Welded Point ID.

In addition, the TSOs are required to provide, and keep up to date, a list of valid contract IDs and their associated retailer codes and contract names with commencement and termination dates (for the allocation agent to use for cross-checking purposes with retailers' contract ID trader information).

Distributor trader information

Distributors are required to notify the allocation agent when gas gates (including interconnection gas gates) are established or decommissioned, together with the gas gate code. When an embedded network is established or decommissioned, distributors are also required to identify the associated notional delivery point. For direct connect gas gates this notification should be provided by the TSO.

Gas Registry trader information

The Gas Registry produces a monthly report (the Gas Gate Trading Report) which notifies the allocation agent of changes to the gas gates at which each retailer has active-contracted (ACTC) customers. The allocation agent uses this report to update trader information for default contract IDs.

Business requirements:

- 1. The allocation agent must accept and store:
 - the effective dates (start and end) when retailers, TSOs and distributors commence and cease operation at gas gates;
 - TSO translation information;
 - the contract ID and effective dates of each retailer's default standard TSA contract;
 - the contract ID and effective dates of each retailer's supplementary contracts together with details of either the associated ICPs or gas gates.

Data inputs:

Trader information for each retailer. Per retailer, details of:

- gas gate; and
- effective start and end dates.

Contract details for each retailer. Per retailer, details of:

- contract ID;
- TSO;

- contract type (default contract (TSA), non-VTC TSA or supplementary);
- ICP numbers or gas gates for supplementary and non-VTC TSA contracts only; and
- effective start and end dates.

TSO gas gate translation information. Per TSO, details of:

- gas gates;
- their Welded Point ID;
- their network code; and
- effective start and end dates.
- TSO retailer translation information: Per TSO, details of:
 - participant codes;
 - their TSO system Shipper IDs; and
 - effective start and end dates.

Gas gate information (see GAR140).

(This is not an exhaustive list nor does it dictate the internal system table structure for storing the information).

Processing:

The allocation agent:

- validates and stores the trader information in the reference data tables; and
- creates a full audit trail entry.

Outputs:

Updated trader information and TSO translation information with an audit trail entry.

Exceptions:

If there are either no matches or more than one match against contract ID, the issue must be raised with the retailer (and if appropriate the TSO) for resolution prior to releasing, to the appropriate allocation participants, the allocation results for the retailer at the gas gate.

Sub-process:	GAS030 Receive gas gate injection quantities
Process:	Accept TSO submissions
Source:	Transmission system owners
Rule references:	41, 43.1.2
Dependencies:	GAM010

Description:

Every TSO is required to provide to the allocation agent the daily metered energy quantities (called delivered energy in OATIS)) injected at each allocated gas gate, by 1200 hours on the 4th business day of the month that immediately follows a consumption period so that the allocation agent can perform the initial allocation.

Every TSO is also required to provide the allocation agent with the daily metered energy quantities injected at allocated gas gate by:

- 0800 on the 9th business day of the 4th month after the consumption period so that the allocation agent can perform the interim allocation; and
- 0800 on the 14th business day of the 13th month after the consumption period so that the allocation agent can perform the final allocation.

TSOs are not required to provide injection quantities for unmetered gas gates or oversized metered gas gates. There is also no *requirement* for TSOs to provide injection quantities for direct connect gas gates, but if this information is made available to the allocation agent then it should be accepted and stored.

For OATIS-based transmission systems the allocation agent must have reached an agreement with the relevant TSO on the terms of use and have been allocated login details.

In the instance of an embedded network, the injection quantities for the notional delivery point which the embedded network is part of will be the injection quantities for the parent distribution system gas gate, provided by the TSO of the parent distribution system.

Business requirements:

- 1. The allocation agent must accept, validate and store the injection quantities provided by the TSOs. Injection quantities for direct connect gas gate, where available, should be accepted and stored.
- 2. The allocation agent must agree a mechanism with each TSO for the transfer of this information in an efficient manner.
- 3. Where injection quantities are provided at individual gas gates that belong to a notional delivery point, the system will aggregate these volumes to the notional delivery point level.

Data inputs:

The OATIS file format, detailed below, will be the format used by all TSOs.

Each file contains information for one gas gate (delivery point).

Each file is in .CSV format.

Each file is essentially a report with titles, sub-headings, data rows and a row of totals. Currently the mechanism for obtaining this information is via a download from the OATIS website. Files can be downloaded individually or, with the appropriate permissioning, the allocation agent is able to download all files into one zipped file in one action. The following format is for each individual file, which is for one gas gate for a complete consumption period.

TSO gas gate translation table (GAM010).

File Format:

Row Number	Attribute	Validation rules
Row 1	Report Title	Must be "Daily Delivery Report". Any extra commas are ignored.
Row 2	<blank></blank>	Ignore.
Row 3	"WP ID:" <gas gate<br="">code></gas>	Must be "WP ID:" followed by a valid welded point identifier e.g. WP ID: BEL24510. Any extra commas are ignored.
Rows 4 to 9	various	Ignore.
		Day must be a valid date in dd/mm/yyyy format for the month. Ignore Uncorrected Volume , Corrected
Rows 10 to 40	<day>,<uncorrecte d Volume>,,,,,<correc ted Volume>,<calorific Value>,<delivered Energy></delivered </calorific </correc </uncorrecte </day>	 Volume and Calorific Value. Delivered Energy is the injected volume for that Day for the gas gate used in the allocation process, expressed in GJ's. The format must be 99999999999999999999999999999999999
Row 41 to 44	<blank></blank>	Ignore
Row 45	<totals>,<total Uncorrected Volume>,,,,,<total Corrected Volume>,, <total delivered<br="">Energy></total></total </total </totals>	Totals will be "Totals". Ignore Total Uncorrected Volume and Total Corrected Volume. Total Delivered Energy must be the total of the daily Delivered Energy figures.
Example

Daily Delivery Report,,,,,,,

WP ID: BEL24510,,,,,,, WP Name: Belmont,,,,,,

24 hours,Metered,,,,,Corrected,Calorific,Delivered to 2400 on,Volume,,,,,Volume,Value,Energy ,(cm),,,,(scm),(MJ/scm),(GJ)

*``1/12/2007","0","","","","54863","40.779","2237.305" "2/12/2007","0","","","","","33196","40.491","1344.14" ``3/12/2007","0","","","","114056","40.55","4625.021" ``*4/12/2007*"*,*"*0*"*,*""*,*""*,*""*,*"*125531*"*,*"*40.67*"*,*"*5105.375*" ``5/12/2007","0","","","","117906","40.843","4815.691" ``6/12/2007","0","","","","132455","40.948","5423.859" ``7/12/2007","0","","","","129635","40.976","5311.959" ``9/12/2007","0","","","","36268","40.726","1477.053" "10/12/2007","0","","","","95049","40.811","3879.139"* "11/12/2007","0","","","","108402","40.929","4436.859" ``12/12/2007","0","","","","","127342","40.996","5220.619" *``13/12/2007","0","","","","104604","41.034","4292.33"* "14/12/2007","0","","","","","102918","41.113","4231.279" *15/12/2007","0","","","","65849","41.065","2704.108" *``16/12/2007","0","","","","45707","40.866","1867.885" "17/12/2007","0","","","","98344","41.007","4032.819" ``18/12/2007","0","","","","105588","41.111","4340.91" ``19/12/2007","0","","","","","111060","41.025","4556.341"* ^{*}20/12/2007","0","","","","","106209","41.059","4360.922" ^{*}23/12/2007","0","","","","36628","40.978","1500.963" ^{*}24/12/2007","0","","","","29331","41.056","1204.231" ****26/12/2007*"*,*"*0*"*,*""*,*""*,*""*,*"*18453*"*,*"*41.334*"*,*"*762.741*" °*27/12/2007*″*,*″*0*″*,*″″*,*″″*,*″″*,*″*44404*″*,*″*41.158*″*,*″*1827.588*″* "28/12/2007","0","","","","35119","41.107","1443.666" ^{**}29/12/2007","0","","","","","24093","41.079","989.721" *``30/12/2007","0","","","","19555","41.122","804.16" ``31/12/2007","0","","","","","23410","41.333","967.621"*

Totals,"0",,,,,"2268596",,"92868.18"

Processing:

The allocation agent:

- validates and stores the injection quantities with a date, time stamp and the associated gas gate using the TSO gas gate translation table (GAM010).
- aggregates any injection volumes provided at individual gas gate level up to the notional delivery point level.

Outputs:

Gas gate injection quantities.

Exceptions:

If there are any validation errors, the complete file is rejected and the issue must be raised with the TSO for resolution.

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the incident report.

Sub-process:	GAS040 Receive monthly submissions
Process:	Accept consumption submissions
Source:	Retailers
Rule references:	30.2.3, 31.4, 32.4, 33.4, 40.1
Dependencies:	GAS020 GAM010

The responsible retailer must provide the allocation agent with the aggregate monthly profiled energy quantities by allocated gas gate for all consumer installations in allocation groups 4 and 6 by 1200 hours on the 4th business day of the month that immediately follows the consumption period to which the information relates so that the allocation agent can perform an initial allocation (rule 31.4).

The responsible retailer must also provide the allocation agent with the aggregate monthly profiled energy quantities by allocated gas gate for all consumer installations in allocation groups 4 and 6 by 0800 hours on the 9th business day of the 4th month following the consumption period to which the information relates so that the allocation agent can perform an interim allocation (rule 32.4).

The responsible retailer must further provide the allocation agent with the aggregate monthly profiled energy quantities by allocated gas gate for all consumer installations in allocation groups 4 and 6 by 0800 hours on the 14th business day of the 13th month that follows the consumption period to which the information relates so the allocation agent can perform a final allocation (rule 33.4).

This is also the mechanism by which retailers report the proportion of historical estimates contained within the consumption information to the allocation agent (rule 40.1).

Business requirements:

- 1. The allocation agent must accept and validate all submissions.
- 2. The allocation agent must store only valid submissions.
- 3. The allocation agent must report any errors to the sender.
- 4. Error reports must have sufficiently detailed error messages to assist users to correct erroneous submissions and to allow them to reload correct information.
- 5. Subsequent submissions must be regarded as superseding earlier submissions with the same key attributes and for the same consumption period.
- 6. Where submissions are provided at individual gas gates that belong to a notional delivery point, the system will aggregate these volumes to the notional delivery point level but only after assigning the correct contract ID.
- 7. All submissions must be date and time stamped on acceptance by the allocation agent.

Data inputs:

Trader information (GAS020).

Reference data.

The key attributes are:

- consumption period,
- allocation participant,
- gas gate,
- allocation group.

File Format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAS040″
Sender	Char (4)	М	Optional
Allocation Participant	Char (4)	М	Valid code of retailer whose consumption information is provided. Each file will contain information for only one allocation participant.
Recipient	Char (4)	М	"ALLA" (code of allocation agent)
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	ΜΜ/ΥΥΥΥ	М	Calendar month to which consumption information applies. In one file there will only be information for one consumption period.
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code where allocation participant trades in consumption period
Network Code	Char (4)	М	Valid network code at gas gate
Allocation Group	Char (1)	М	Allocation group, either 4 or 6
Contract ID	Char (8)	0	Contract ID for gas transmission contract. Optional, but always ignored by the allocation system. Derived by the allocation agent from the retailer trader information – gas transmission contracts.
Consumption (GJ)	Num (8.3)	М	Consumption in GJ
Quantity of Historical Estimate (GJ)	Num (8.3)	М	Consumption in GJ
Number of Installations	Num (6)	0	Number of installations making up the monthly aggregate volume. Optional.

Example (Monthly	HDR,GAS040,SENA,RETA,ALLA,02/11/2008,12:32:02,2
Submission – Groups 4	DET,10/2008,RETA,TWA35610,NETA,4,1109,445.050,123.754,85
and 6):	DET,10/2008,RETA,TWA35610,NETA,6,1109,1536.667,384.166,1002

Processing:

The allocation agent:

- validates submissions, derives the contract ID and stores valid data with a date and time stamp.
- reports errors to the sender.

Outputs:

Valid monthly submissions for allocation groups 4 and 6.

Exceptions:

If there are any validation errors, the complete file is rejected.

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the Incident report.

Sub-process:	GAS050 Receive daily ICP submissions
Process:	Accept consumption submissions
Source:	Retailers
Rule references:	30.1.2, 30.3, 31.1, 31.2, 32.1, 32.2, 33.1, 33.2, 40.1
Dependencies:	GAS020 GAM010

The responsible retailer is required to provide the allocation agent with the daily metered energy quantities for all consumer installations in allocation groups 1 and 2, and daily profiled energy quantities for all consumer installations in allocation group 3, by allocated gas gate, by 1200 hours on the 4th business day of the month that immediately follows the consumption period to which the information relates, so the allocation agent can perform an initial allocation (rules 31.1 and 31.2).

The responsible retailer is also required to provide the allocation agent with the daily metered energy quantities for all consumer installations in allocation groups 1 and 2, and daily profiled energy quantities for all consumer installations in allocation group 3, by allocated gas gate, by 0800 hours on the 9th business day of the 4th month that follows the consumption period to which the information relates, so the allocation agent can perform an interim allocation (rule 32.1 and 32.2).

The responsible retailer is further required to provide the allocation agent with the daily metered energy quantities for all consumer installations in allocation groups 1 and 2, and daily profiled energy quantities for all consumer installations in allocation group 3, by allocated gas gate, by 0800 hours on the 14th business day of the 13th month that follows the consumption period to which the information relates, so the allocation agent can perform a final allocation (rule 33.1 and 33.2).

This is also the mechanism by which retailers report the proportion of historical estimates contained within the consumption information to the allocation agent (rule 40.1).

Business requirements:

- 1. The allocation agent must accept and validate all submissions.
- 2. The allocation agent must store only valid submissions.
- 3. The allocation agent must report any errors to the sender.
- 4. Error reports must have sufficiently detailed error messages to assist users to correct erroneous submissions and to allow them to reload correct information.
- 5. Subsequent submissions must be regarded as superseding earlier submissions with the same key attributes and for the same consumption period.
- 6. All submissions must be date and time stamped on acceptance by the allocation agent.
- 7. Where submissions are provided at individual gas gates that belong to a notional delivery point, the system will aggregate these volumes to the notional delivery point level but only after assigning the correct contract ID. (In this instance as the data is at ICP level the allocation system will be 'changing' the gas gate).

- 8. The retailer must supply information for every day that it is supplying gas to an ICP i.e. there cannot be gaps if say the ICP was inactive for a few days in the month. Zero values must be supplied for days with no consumption. The only time gaps are permitted in the submission file is when an ICP switched during the month and therefore ICP information ended for one retailer and commenced for another retailer partway through a month (i.e. for a particular ICP there is a leading gap from the start of the consumption period or a trailing gap to the end of the consumption period signifying the start or end of supply to the ICP). (In regards to rules 30.1.2 and 30.2.3, the interpretation of "supply" in these specifications is the supply of gas, whether or not that gas is being consumed, and includes the commencement of a contract for the supply of gas).
- 9. The retailer can only submit information for an ICP once in a file i.e. a retailer cannot provide two submissions in the same file for the same ICP identifier. This is because the system will see the second submission as a duplicate, rather than a revision.

Data inputs:

Trader information (GAS020).

Reference data.

The key attributes are:

- consumption period,
- allocation participant,
- ICP,
- consumption day

File Format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAS050″
Sender	Char (4)	М	Optional
Allocation Participant	Char (4)	М	Valid code of retailer whose consumption information is provided. Each file will contain information for only one allocation participant.
Recipient	Char (4)	М	"ALLA" (code of allocation agent)
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	ΜΜ/ΥΥΥΥ	М	Calendar month to which consumption information applies. In one file there will only be information for one consumption period.

Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code where allocation participant trades in consumption period
Network Code	Char (4)	М	Valid network code at gas gate
Allocation Group	Char (1)	М	1, 2 or 3.
Profile Code	Char (4)	М	Valid static deemed profile code for use by retailer or "XTOU".
Contract ID	Char (8)	0	Contract ID for the supply of gas. Optional, but always ignored by the allocation system. Derived by the allocation agent from the retailer trader information - contracts.
ICP	Char (15)	М	ICP unique identifier
Consumption Day	DD/MM/YYYY	Μ	Date of the day in the consumption period to which consumption information applies
Consumption (GJ)	Num (8.3)	М	Consumption in GJ
Quantity of Historical Estimate (GJ)	Num (8.3)	M/O	Consumption in GJ. Mandatory for allocation group 3 consumption information.
Estimate Indicator	Char (1)	0	"E" used to indicate estimated data in lieu of missing data for allocation groups 1,2, otherwise field left blank

Example (Daily	HDR,GAS050,SENA,RETA,ALLA,02/11/2008,12:32:02,4
Submission – Groups 1-	DET,10/2008,RETA,TWA35610,NETA,1,XTOU,1120,0123456789QT123,01/10
	/2008,759.025
3):	DET,10/2008,RETA,TWA35610,NETA,1,XTOU,1120,0123456789QT123,02/10
	/2008,787.756
	DET,10/2008,RETA,TWA35610,NETA,3,S316,1120,0123456789QT124,01/10
	/2008,259.025,123.754
	DET,10/2008,RETA,TWA35610,NETA,3,S316,1120,0123456789QT124,02/10
	/2008,259.025,123.754
	Etc

Processing:

The allocation agent:

- validates submissions, derives the contract ID and stores valid data with a date and time stamp.
- reports errors to the sender.

Outputs:

Valid daily submissions for allocation groups 1, 2 and 3.

Exceptions:

If there are any validation errors, the complete file is rejected.

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the Incident report.

Sub-process:	GAS060 Receive daily submissions for dynamic deemed profiles
Process:	Accept consumption submissions
Source:	Retailers
Rule references:	30.2.3, 31.3, 32.3, 33.3, 40.1
Dependencies:	GAS020 GAM010

The responsible retailer must provide the allocation agent with the aggregate daily profiled energy quantities for all consumer installations in allocation group 5, by allocated gas gate, by 1200 hours on the 4th business day of the month that immediately follows the consumption period to which the information relates so the allocation agent can perform an initial allocation (rule 31.3).

The responsible retailer must also provide the allocation agent with the aggregate daily profiled energy quantities for all consumer installations in allocation group 5, by allocated gas gate by 0800 hours on the 9th business day of the 4th month that follows the consumption period to which the information relates so that the allocation agent can perform an interim allocation (rule 32.3).

The responsible retailer must further provide the allocation agent with the aggregate daily profiled energy quantities for all consumer installations in allocation group 5, by allocated gas gate, by 0800 hours on the 14th business day of the 13th month that follows the consumption period to which the information relates so the allocation agent can perform a final allocation (rule 33.3).

This is also the mechanism by which retailers report the proportion of historical estimates contained within the consumption information to the allocation agent (rule 40.1).

Business requirements:

- 1. The allocation agent must accept and validate all submissions.
- 2. The allocation agent must store only valid submissions.
- 3. The allocation agent must report any errors to the sender.
- 4. Error reports must have sufficiently detailed error messages to assist users to correct erroneous submissions and to allow them to reload correct information.
- 5. Subsequent submissions must be regarded as superseding earlier submissions with the same key attributes and for the same consumption period.
- 6. All submissions must be date and time stamped on acceptance by the allocation agent.
- Where submissions are provided at individual gas gates that belong to a notional delivery point, the system will aggregate these volumes to the notional delivery point level but only after assigning the correct contract ID.
- 8. A submission must be supplied for every day in the month unless the retailer's trader information has commencement/cessation dates partway through a month, or a leading gap from the start of the consumption period or a trailing gap to the end of the consumption period exists in the submission file signifying the retailer starting or ceasing to supply allocation group 5 consumers.

Data inputs:

Trader information (GAS020).

Reference data.

The key attributes are:

- consumption period
- allocation participant
- gas gate
- profile code
- consumption day

File Format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAS060″
Sender	Char (4)	М	Optional
Allocation Participant	Char (4)	M	Valid code of retailer whose consumption information is provided. Each file will contain information for only one allocation participant.
Recipient	Char (4)	М	"ALLA" (code of allocation agent)
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	ΜΜ/ΥΥΥΥ	Μ	Calendar month to which consumption information applies. In one file there will only be information for one consumption period.
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code where allocation participant trades in consumption period
Network Code	Char (4)	М	Valid network code at gas gate
Allocation Group	Char (1)	М	Allocation group 5 only
Profile Code	Char (4)	М	Registered dynamic deemed profile code approved for use by retailer.
Contract ID	Char (8)	0	Contract ID for the supply of gas. Optional, but always ignored by the allocation system. Derived by the allocation agent from the retailer trader information - contracts.

Description	Туре	M/O	Validation
Consumption Day	DD/MM/YYYY	Μ	Date of the day in the consumption period to which consumption information applies
Consumption (GJ)	Num (8.3)	М	Consumption in GJ
Quantity of Historical Estimate (GJ)	Num (8.3)	Μ	Consumption in GJ
Number of Installations	Num (6)	Μ	Number of installations making up the daily aggregate volume

Example (Daily Submission-Group 5): HDR,GAS060,SENA,RETA,ALLA,02/11/2008,12:32:02,2 DET,10/2008,RETA,TWA35610,NETA,5,D316,1109,01/10/2008,759.025,123.7 54,75 DET,10/2008,RETA,TWA35610,NETA,5,D316,1109,02/10/2008,384.756,62.36 5,75 Etc

Processing:

The allocation agent:

- validates submissions, derives the contract ID and stores valid data with a date and time stamp.
- reports errors to the sender.

Outputs:

Valid daily submissions for allocation group 5.

Exceptions:

If there are any validation errors, the complete file is rejected.

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the incident report.

Sub-process:	GAS070 Receive as-billed information
Process:	Accept other retailer submissions
Source:	Retailers
Rule references:	52.2.1
Dependencies:	GAS020 GAM010

The Rules require each retailer to provide the allocation agent with the total energy quantities billed in gigajoules, by allocated gas gate and aggregated by invoice month, for the previous billing month by 0800 hours on the 11th business day of each month. N.B. The "invoice month" refers to the previous consumption period (i.e. the last calendar month).

Business requirements:

- 1. The allocation agent must accept and validate all submissions. (N.B. as-billed information may be positive or negative.)
- 2. The allocation agent must store only valid submissions.
- 3. The allocation agent must report any errors to the sender.
- 4. Error reports must have sufficiently detailed error messages to assist users to correct erroneous submissions and to allow them to reload correct information.
- 5. Subsequent submissions must be regarded as superseding earlier submissions with the same key attributes and for the same consumption period.
- 6. The retailer must provide as-billed information for every allocated gas gate for which a consumption information submission was to be provided, for the previous billing month (i.e. the calendar month prior to the previous consumption period). (N.B. Because of the lag between when consumption information is submitted and when as-billed information is submitted, the retailer may end up submitting a GAS070 file for an allocated gas gate after a trading notification has ceased at that allocated gas gate. Therefore, the system shall accept all as-billed information submitted, but shall provide a warning to the person uploading the file if there is no trading notification in place. These warning messages should still be forwarded to the Incident Report.)

Data inputs:

Trader information (GAS020).

Reference data.

The key attributes are:

- Month Billed
- Allocation Participant
- Gas Gate

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAS070″
Sender	Char (4)	М	Optional.
Allocation Participant	Char (4)	М	Valid code of retailer whose information is provided. Each file will contain information for only one allocation participant.
Recipient	Char (4)	М	"ALLA" (code of allocation agent)
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/0	Validation
Detail Record Type	Char (3)	М	"DET"
Month Billed	ΜΜ/ΥΥΥΥ	Μ	The previous consumption period. In one file there will only be information for one billing month.
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code where allocation participant trades in consumption period
Network Code	Char (4)	М	Valid network code at gas gate
Actual Sales (GJ)	Num (8.3)	М	Consumption in GJ

Example (As-Billed	HDR,GAS070,SENA,RETA,ALLA,02/11/2008,12:32:02,2
Data):	DE1,10/2008,RETA,TWA35610,NETA,3224.232
Data)	DET,10/2008,RETA,HST05210,NETA,2595.726

Processing:

The allocation agent:

- validates submissions and stores valid data with a date and time stamp.
- reports errors to the sender (see below).

Where anomalies are found when validating the gas gates of a retailer's file (additional information is provided or information is missing for expected gas gates), then warning messages, not errors, are reported to the sender.

Outputs:

Valid as-billed information for use in as-billed report (GAR080).

Exceptions:

If there are any validation errors, the complete file is rejected. The file is not rejected if there are only warnings.

If the complete information is not supplied by the time specified in the Rules, a potential rule breach is logged and reported in the incident report.

Sub-process:	GAS080 Receive meter reading frequency information
Process:	Accept other retailer submissions
Source:	Retailers
Rule references:	40.2 (reference to 29.4.3 and 29.5)
Dependencies:	GAM010

Retailers are required to meet certain meter reading frequency obligations for consumer installations in allocation groups 3 to 6. By 1200 hours on the 10th business day of each month each retailer must report on the dates, frequency and number of validated register readings obtained in accordance with rules 29.4.3 and 29.5 during the previous 4 months and 12 months. Non-TOU (meter) in the context of this file format includes a TOU meter assigned to allocation groups 5 and 6 in accordance with rule 29.3 and 29.6.

Business requirements:

- 1. The system must have a process that accepts, validates and reports errors back to the sender and stores valid submissions in an efficient manner.
- 2. Error reports should have detailed error messages to assist users in correcting erroneous submissions and to allow them to reload correct information.
- 3. Subsequent submissions must be regarded as superseding earlier submissions with the same key attributes and for the same consumption period.
- 4. A report is expected for every retailer that provides submissions for at least one of the allocation groups 3, 4, 5 or 6.

Data inputs:

Reference data.

The key attributes are:

- Allocation Participant
- Consumption Period.

File Format:	
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Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAS080″
Sender	Char (4)	М	Optional
Allocation Participant	Char (4)	M	Valid code of retailer whose data is provided. Each file will contain information for only one allocation participant.
Recipient	Char (4)	Μ	"ALLA" (code of allocation agent)

Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Allocation Participant	Char (4)	М	Valid code of retailer
Consumption Period	ΜΜ/ΥΥΥΥ	Μ	The last month included in the period to which the information applies. In one file there will only be information for one consumption period.
Non-TOU Consumer Installation Count	Num (6)	М	Check format.
Rolling 4 Month Non-TOU Consumer Installation Count	Num (6)	М	Check format.
Rolling 4 Month Non-TOU Consumer Installation Validated Register Reading Count	Num (6)	M	Check format.
Rolling 4 Month Non-TOU Validated Register Reading Percentage	Num (3.2)	М	Must be the rolling 4 month non-TOU consumer installation validated register reading count divided by rolling 4 month non-TOU consumer installation count * 100
Rolling 12 Month Non-TOU Consumer Installation Count	Num (6)	М	Check format.
Rolling 12 Month Non-TOU Validated Register Reading Count	Num (6)	Μ	Check format.
Rolling 12 Month Non-TOU Validated Register Reading Percentage	Num (3.2)	М	Must be the rolling 12 month non-TOU consumer installation validated register reading count divided by rolling 12 month non-TOU consumer installation count * 100

Example (Meter Read	HDR,GAS080,SENA,RETA,ALLA,02/11/2008,12:32:02,1
Frequency Data):	DET,RETA,10/2008,1004,1130,1065,94.25,950,946,99.58

Processing:

The allocation agent:

- validates submissions and stores valid data with a date and time stamp.
- reports errors to the sender.

Outputs:

Valid meter reading frequency information for use in meter reading frequency report (GAR100).

Exceptions:

If there are any validation errors, the complete file is rejected.

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the Incident report.

Sub-process:	GAP010 Calculate AUFG factors
Process:	Perform annual tasks
Module reference:	GAU030
Rule references:	46.3.1, 46.4.2, 47 (see also 43.3)
Dependencies:	GAS030 GAS040 GAS050 GAS060 GAP040

The allocation agent calculates the annual UFG factor (AUFG factor) for a gas year for every allocated gas gate (singles and notional delivery points but not the individual gas gates of a notional delivery point).

The AUFG factor applicable to each allocated gas gate is calculated annually and published on the 1st business day of July (see GAR090). It applies to the whole gas year (for every consumption period within that year) from 1st October following publication (the commencement of the gas year).

Business requirements:

1. The allocation agent must calculate the AUFG factor in accordance with the following formula (rule 46):

$AUFG = \Sigma EI / \Sigma CI$

where:

AUFG is the applicable AUFG factor for the allocated gas gate.

 Σ EI is the sum of the best available daily metered energy quantities injected for a particular allocated gas gate during the 12 months up to and including February of the previous gas year (in GJ).

 ΣCI is the sum of the best available consumption information for all allocation groups for the allocated gas gate during the 12 months up to and including February of the previous gas year (in GJ).

- 2. If a force majeure event occurs at an allocated gas gate, the allocation agent may give notice to Gas Industry Co, provided such notice is given no later than 10 business days prior to the date that the AUFG factor must be published. Gas Industry must then determine the applicable AUFG factor for that allocated gas gate in the next gas year. In this case the allocation agent must instead use the AUFG factor calculated and provided by Gas Industry Co (rule 47).
- 3. The allocation agent must be able to recalculate and republish the AUFG factor for one or more allocated gas gates if an error is discovered and Gas Industry Co determines that a correction is required (rule 46A).
- 4. The allocation agent must publish the AUFG factor per allocated gas gate on the allocation agent website (see report GAR090).
- 5. If the AUFG factor for an allocated gas gate is corrected under rule 46A or determined by Gas Industry Co under rule 47, the publication of the AUFG factor must indicate that this was the case.

Data inputs:	
Today's date.	

Submission information for the appropriate consumption periods from retailers (GAS040, GAS050, GAS060 and estimates from GAP040).

Injection information from TSOs (GAS030 and estimates from GAP040) for the appropriate consumption periods.

Processing:

The allocation agent, for each gas gate:

- aggregates the appropriate consumption periods' daily injection quantities;
- aggregates the appropriate consumption periods' consumption information;
- divides the former by the latter to give the AUFG factor;
- if rule 47 applies, inputs the AUFG factor provided by Gas Industry Co together with an assessment indicator;
- publishes the AUFG factors and any indicators on the website using output GAR090.

Outputs:

AUFG factors per allocated gas gate and gas year (with an appropriate indicator when corrected or provided by Gas Industry Co) for use in the allocation process of consumption periods in the relevant gas year.

Exceptions:

If ΣC is zero then AUFG is 1 (one).

Sub-process:	GAP020 Classify allocated gas gates
Process:	Perform annual tasks
Module reference:	GAU035
Rule references:	25C
Dependencies:	GAS010 GAS040 GAS050 GAP040 GAP080

G1M gas gates are a subset of allocated gas gates, at which the G1M monthly UFG factor is applied instead of the standard allocation methodology (AUFG factor & MUFG factor).

The allocation agent must determine the list of G1M gas gates for each gas year by applying the G1M criteria (provided by Gas Industry Co) to consumption and UFG information for each allocated gas gate. Gas gates that meet the criteria are allocated using the G1M monthly UFG factor for each consumption period in the gas year; gas gates that don't meet the criteria are allocated using the standard allocation methodology.

The determination of G1M gas gates is published on the 1^{st} business day of July each year (see GAR090) and applies to consumption periods in the following gas year, beginning 1^{st} October following publication.

Business requirements:

- 1. When determining whether or not an allocated gas gate will be a G1M gas gate for a gas year, the allocation agent must apply the G1M criteria to the best available data for consumption periods in the 12 months up to and including February of the previous gas year. (For example, when determining the G1M gas gates applicable for consumption periods in the 2014 gas year (beginning 1 October 2013), the allocation agent will use data from the period March 2012 to February 2013 and publish the result by the 1st business day of July 2013.)
- 2. The G1M criteria are determined (and may be amended) by Gas Industry Co from time to time and comprise:
 - a TOU load proportion threshold, for example 80% TOU; and
 - an MUFG volatility threshold, for example 1.0±0.1

An allocated gas gate must meet or exceed the TOU load proportion threshold for the 12 month period <u>and</u> meet or exceed the MUFG volatility threshold for at least one month in the 12 month period, in order to be classified as a G1M gas gate.

3. The TOU load proportion threshold must be applied against the result of the following formula for each allocated gas gate:

Proportion of TOU load = $\Sigma CI_{1-2} / \Sigma CI_{1-6}$

where:

 ΣCI_{1-2} is the sum of the best available consumption information for allocation groups 1 and 2 for all retailers at the gas gate during the 12 months up to and including February of the previous gas year (in GJ).¹²

¹² This total includes any allocation group 1 or 2 consumption that is submitted under allocation group 3 pursuant to the Exemption (DR10-04-S: Global 1-Month UFG Methodology) Notice 2010

 ΣCI_{1-6} is the sum of the best available consumption information for all allocation groups and for all retailers at the gas gate during the 12 months up to and including February of the previous gas year (in GJ).

- 4. The MUFG volatility threshold must be applied to each allocated gas gate by counting the number of occurrences of an MUFG factor outside of the given threshold in the most recent allocation for each of the 12 months up to and including February of the previous gas year.¹³
- 5. The allocation agent must publish the determination of G1M gas gates applicable to each gas year on its website (see GAR090).

Data inputs:

G1M criteria determined by Gas Industry Co;

Consumption information submitted by retailers for the appropriate consumption periods (GAS040, GAS050, GAS060 and estimates from GAP040);

MUFG factors for each allocated gas gate for the most recent allocation of the appropriate consumption periods, calculated using GAP080.

Processing:

For each allocated gas gate, the allocation agent:

- extracts and aggregates consumption information for the appropriate consumption periods and calculates proportion of TOU load;
- extracts MUFG factors for the appropriate consumption periods;
- applies G1M criteria to results;
- stores the result of the determination (either G1M gas gate or not) for use in the allocation process for the forthcoming gas year.

Outputs:

Per allocated gas gate for the next gas year either the G1M methodology or the standard allocation methodology.

TOU load proportion and MUFG volatility count for each allocated gas gate.

Exceptions:

¹³ Purusant to clause 6.5 of Gas Industry Co's Reconciliation Determination v2, for gas gates covered by the G1M exemption the MUFG count will be manually assessed as if TOU volumes had been submitted under their correct allocation groups. Note that this will not be reflected in the 'MUFG volatility indicator' column of the GAR090.

Sub-process:	GAP030 Determine consumption period and stage
Process:	Prepare allocation run
Module reference:	GAU010
Rule references:	44, 48, 49, 50, 51
Dependencies:	

The allocation agent must perform an initial allocation for the immediately preceding consumption period by 1200 hours on the 5th business day of each month (rule 48). The allocation agent must perform an interim allocation for the 4th preceding consumption period by 0800 hours on the 11th business day of each month, e.g. in February 2009 an interim allocation will be performed for October 2008 (rule 49).

The allocation agent must perform a final allocation for the 13th preceding consumption period. By 0800 hours on the 16th business day of each month, e.g. in November 2009 a final allocation will be performed for October 2008 (rule 50).

At any time during the period after an initial allocation has been performed up to 12 months after a final allocation has been performed, Gas Industry Co may require the allocation agent to perform a special allocation for the relevant consumption period in addition to an initial allocation, an interim allocation, or a final allocation for that same consumption period (rule 51).

Business requirements:

- 1. The allocation agent must schedule the appropriate allocation run for the given consumption period and allocation stage i.e. initial, interim, final or special.
- 2. Each allocation run, which includes the delivery of all outputs and reports, must be completed by the times specified in the Rules.
- 3. The latest and best available submission information must be used in each run.
- 4. An allocation run must be able to be re-run in accordance with rule 44.

Data inputs:

Business day of month.

Processing:

The allocation agent:

• determines the consumption period and allocation stage for the run.

Outputs:

Consumption period and allocation stage.

Sub-process:	GAP040 Check for completeness and estimate missing data
Process:	Prepare allocation run
Module reference:	GAU020
Rule references:	43
Dependencies:	GAS010 GAS020 GAS030 GAS040 GAS050 GAS060 GAP030 GAP130

The allocation agent checks that all the required information has been received from all allocation participants for all allocated gas gates prior to commencing the allocation process. Where information is missing or in error, the allocation agent should, if time permits, notify the relevant allocation participants and request the missing information be submitted or corrected. Otherwise, the allocation agent is required to estimate consumption and injection on behalf of the allocation participant and create appropriate submissions. Estimation is a process of last resort.

Business requirements:

- 1. The allocation agent must check submissions against the trader information provided by retailers, TSOs and the Gas Registry. If expected submissions are missing, the allocation agent will contact the allocation participant and request that it is provided, if time permits.
- 2. The allocation agent must estimate consumption wherever an allocation participant has failed to submit information (i.e. there is missing information) by the times specified in the Rules and there is no reasonable explanation available to the allocation agent for the omission.
- 3. The allocation agent must define missing information as follows:
 - where trader information indicates that a retailer has started trading at a new allocated gas gate, a submission is missing if there is no submission, for any type of allocation group, for the first trading consumption period i.e. the month in which trading commences;
 - where trader information from the Gas Registry indicates that a retailer is trading at an allocated gas gate, a submission is missing if there is no submission for any allocation group at that allocated gas gate;
 - for allocated gas gates in allocation groups 1, 2 and 3, a submission is missing when there is a current contract ID for the retailer with an ICP listed for which there has been no submission provided;
 - for injection quantities, missing information is when a TSO has failed to supply information for an allocated gas gate (either for a part, or for a whole, month) as indicated in its trader information;

Note: for unmetered gas gates and oversized metered gas gates, injection quantities will always be missing.

- 4. The allocation agent must estimate daily injection quantities at allocated gas gates for days when a TSO has failed to submit information by the times specified in the Rules and for unmetered and oversized metered gas gates.
- 5. Allocation results calculated using submission quantities where the retailer has set the estimate indicator to "E" in its submission or the allocation agent estimated the submission or injection quantities must be marked as being such in applicable output reports.
- 6. The allocation agent must agree on any estimation algorithms with Gas Industry Co.

Agreed estimation algorithm

- For allocation groups 4 and 6, the system uses the previous consumption period's monthly consumption quantity multiplied by a factor to adjust for the number of days in the current consumption period and then a factor to adjust for seasonality (whereby the figure is multiplied by the current consumption period's injection quantity at the allocated gas gate divided by the previous consumption period's injection quantity at the allocated gas gate).
- For allocation groups 1, 2 and 3, the system uses the appropriate (business day or non-business day) average daily consumption quantity for each ICP in the previous consumption period, adjusted for seasonality (whereby the figure is multiplied by the current consumption period's injection quantity at the allocated gas gate divided by the previous consumption period's injection quantity at the allocated gas gate) (see GAP130).
- For allocation group 5, the system uses the appropriate (business day or non-business day) average daily profiled consumption information in the previous consumption period for allocation group 5, adjusted for seasonality (whereby the figure is multiplied by the current consumption period's injection quantity at the allocated gas gate divided by the previous consumption period's injection quantity at the allocated gas gate).
- For missing injection quantities for other than unmetered or oversized metered gas gates, the system uses the appropriate (business day or non-business day) average injection quantities in the previous consumption period, adjusted for seasonality (the figure is then multiplied by the current consumption period's total consumption information quantity at the allocated gas gate divided by the previous consumption period's total consumption information quantity at the allocated gas gate divided by the previous consumption period's total consumption information quantity at the allocated gas gate) and adjusted for a business days factor (the figure is then multiplied by the ratio of the number of business days in the current consumption period over the number of business days in the previous consumption period, multiplied by the ratio of the number of non-business days in the previous consumption period.
- For injection quantities at unmetered or oversized metered gas gates, the system uses, for each day, the consumption information for allocation groups 1, 2, 3 and 5 for that day, plus an amount equal to the average daily consumption information for allocation groups 4 and 6 for the consumption period (rule 43.1.3), i.e.

$$EI_d = CI_{1-3,5,d} + (CI_{4,6} / \Sigma d)$$

Where:

 \mathbf{EI}_{d} is the estimated daily injection quantity in GJ for the day

 $\textbf{CI}_{1\text{-}3,5,d}$ is the consumption information for allocation groups 1, 2, 3 and 5 for the day

 $\mathbf{CI}_{4,6}$ is the consumption information for allocation groups 4 and 6 for the consumption period

 $\pmb{\Sigma d}$ is the total number of days in the consumption period

- In the event that information provided at an allocated gas gate for the current consumption period is missing some or all of the injection quantity and some or all of the consumption information, then in order to adjust the estimate of the injection/consumption quantities for seasonality, the previous consumption period's injection/consumption quantities (adjusted for business day / non-business day) are multiplied by the ratio of the total injection quantity across all gas gates for which there is no missing submission data in the current consumption period over the total injection quantity across all of the same gas gates for the previous consumption period. This figure is then multiplied by the business days factor, calculated as above.
- An estimated quantity of zero is created in the instance where trading information indicates that a retailer was intending to supply gas at an allocated gas gate from the start of the consumption period, but then did not provide any consumption information to the allocation agent (and the allocation agent was not able to obtain an estimate from the retailer in time to prevent the estimation algorithm from needing to be used).
- When consumption information is estimated, the associated quantity of historical estimates must be set to zero.
- When consumption information is estimated using the previous consumption period's information, the profile code (if relevant) should also be extracted from the previous consumption period's information.
- When consumption information is estimated, the contract ID must be obtained from the latest information held about the retailer's gas transmission contracts.

Data inputs:

Consumption period.

Allocation stage.

Trader information (GAS020).

Consumption information for the current and previous consumption periods from retailers (GAS040, GAS050, GAS060).

Injection information from TSOs for the current and previous consumption periods (GAS030).

Estimated daily average consumption per ICP in the previous consumption period (GAP130).

Business day and non-business day average injection information for the previous consumption period per allocated gas gate.

Reference data – average daily consumption per allocation group.

Retailer gas transmission contract ID details

Processing:

The allocation agent:

- checks that the consumption information has been provided by each retailer for the consumption period at the allocated gas gates indicated in their trader information;
- checks that the TSOs have provided daily injection quantities at each of their allocated gas gates for each day in the consumption period (unless the gas

gate was commissioned or decommissioned partway through a consumption period) as indicated in the trader information;

- reports missing information.
- for missing information, where no reasonable explanation is given by the allocation participant or can be made by the allocation agent, generates consumption and injection submissions for these estimates, together with an additional estimate indicator (set to `E').
- includes these estimated submissions in subsequent processes.

Outputs:

Details of missing information.

Consumption and injection submissions created by the system with an attached estimate indicator set to `E'.

Exceptions:

If the information is not supplied by the time specified in the Rules, a rule breach is logged and reported in the incident report for each allocation participant in breach, except in the case where trading information indicates that a retailer has started trading at a new allocated gas gate under a default contract (STD1) but it has not provided consumption information for the initial allocation of the consumption period during which it started trading.

Sub-process:	GAP050 Apply AUFG factors to allocation groups 1 & 2 of all gas gates
Process:	Determine allocated quantities
Module reference:	GAU040
Rule references:	45.2.3
Dependencies:	GAS030 GAS050 GAP010 GAP030 GAP040

The allocation agent calculates the allocated quantities for each day in the consumption period for allocation groups 1 and 2 for each allocated gas gate (singles and notional delivery points but not the individual gas gates of a notional delivery point) and retailer applying the AUFG factor to daily metered energy quantities for consumer installations at each allocated gas gate.

The resultant allocated quantities for standard gas gates are used in this consumption period.

The resultant allocated quantities for G1M gas gates are not used in this consumption period but are retained for the next annual determination of G1M gas gates (GAP020).

Business requirements:

1. For each consumption period and allocation stage, the allocation agent must calculate the allocated quantities for allocation groups 1 and 2 (separately not combined) for each allocated gas gate, retailer, contract ID and consumption day in the consumption period, in accordance with the following formula:

$AQ_{1\&2} = AUFG \times CI_{1\&2}$

where:

AQ_{1&2} is the quantity of gas in GJ to be allocated to allocation groups 1 and 2 for the day, retailer, contract ID and allocated gas gate (in GJ).

AUFG is the applicable annual UFG factor calculated in accordance with rule 46 (and calculated in GAP010) for the allocated gas gate.

CI_{1&2} is the consumption information for allocation groups 1 and 2 for the day, retailer, contract ID and allocated gas gate (in GJ) provided in accordance with rules 31 to 33 (and submitted in GAS050 and estimated in GAP040).

2. If an AUFG factor has been corrected and republished pursuant to rule 46A then the corrected AUFG factor must be used in all allocations that take place after the AUFG factor is republished.

Data inputs:

Consumption period.

Allocation stage.

AUFG factor applicable to consumption period and allocated gas gate (calculated in GAP010).

Consumption information for the appropriate consumption periods for all allocated gas gates and allocation groups 1 & 2 (provided from GAS050 and GAP040).

Processing:

The allocation agent:

- extracts the appropriate consumption information for allocation groups 1 and 2 for all allocated gas gates;
- calculates and stores the allocation quantity by multiplying the consumption figure by the applicable AUFG.

Outputs:

Allocated quantities for allocation groups 1 and 2 (separately not combined) for each allocated gas gate, retailer, contract ID, consumption day in the consumption period, and allocation stage.

Sub-process:	GAP060 Calculate G1M MUFG factors
Process:	Determine allocated quantities
Module reference:	GAU050
Rule references:	46.3.3
Dependencies:	GAS030 GAS040 GAS050 GAS060 GAP020 GAP030 GAP040

The allocation agent calculates the G1M monthly UFG factor (G1M MUFG) for G1M gas gates, which is used in the calculation of allocated quantities for all allocation groups of G1M gas gates. The allocation agent publishes these factors on the website (see GAR070).

Business requirements:

- 1. For each consumption period and allocation stage, the allocation agent must calculate and store the G1M MUFG factor for each G1M gas gate.
- 2. The allocation agent must calculate the G1M MUFG factor for G1M gas gates in accordance with the following formula:

G1M MUFG = $\Sigma EI_d / \Sigma CI_{1-6}$

where:

G1M MUFG is the applicable G1M MUFG factor for the G1M gas gate for the consumption period.

 ΣEI_d is the sum of the daily metered energy quantities injected at the G1M gas gate for the consumption period provided by the TSO under rule 41 (in GJ), i.e. output from GAS030 and estimated in GAP040.

 ΣCI_{1-6} is the sum of the consumption information for allocation groups 1 to 6 for the G1M gas gate for the consumption period provided in accordance with rules 31 to 33 (in GJ), i.e. output from GAS040, GAS050, GAS060 and estimated in GAP040.

Data inputs:

Consumption period.

Allocation stage.

List of G1M gas gates applicable to the consumption period (GAP020).

Consumption information for the G1M gas gates and appropriate consumption period for all allocation groups (GAS040, GAS050, GAS060 and GAP040).

Injection information for the G1M gas gates and appropriate consumption period (GAS030 and GAP040).

Processing:

The allocation agent:

- determines which gas gates are G1M gas gates;
- extracts the consumption submissions and injection information for these G1M gas gates;
- calculates and stores the G1M MUFG factor for each G1M gas gate.

N.B. MUFG factors can have negative or zero values.

Outputs:

G1M MUFG per G1M gas gate for the consumption period and allocation stage.

Exceptions:

If $\Sigma CI_{1\text{-}6}$ is zero then use ΣEI_d in the calculation of G1M MUFG.

Sub-process:	GAP070 Apply G1M MUFG factors to allocation groups 1, 2, 3 & 5
Process:	Determine allocated quantities
Module reference:	GAU055
Rule references:	45.2.4A
Dependencies:	GAS030 GAS050 GAS060 GAP020 GAP030 GAP040 GAP060

The allocation agent calculates the allocated quantities for each day in the consumption period for allocation groups 1, 2, 3 and 5 for each G1M gas gate (singles and notional delivery points but not the individual gas gates of a notional delivery point) per retailer.

Business requirements:

1. The allocation agent must calculate and store the allocated quantities for each allocation group 1, 2, 3 and 5 (separately not combined) for each G1M gas gate, retailer, contract ID and consumption day in the consumption period, in accordance with the following formula:

$AQ_{1,2,3,5} = G1M MUFG \times CI_{1,2,3,5}$

where:

 $AQ_{1,2,3,5}$ is the quantity of gas in GJ to be allocated to allocation groups 1, 2, 3 and 5 for the day, retailer, contract ID and G1M gas gate (in GJ).

G1M MUFG is the applicable G1M MUFG factor calculated in accordance with rule 46.3.3 (and calculated in GAP060) for the G1M gas gate.

CI_{1,2,3,5} is the consumption information for allocation groups 1, 2, 3 and 5 for the day, retailer, contract ID and G1M gas gate (in GJ) provided in accordance with rules 31 to 33 (and submitted in GAS050, GAS60 and estimated in GAP040).

Data inputs:

Consumption period.

Allocation stage.

List of G1M gas gates applicable to the consumption period (GAP020).

G1M MUFG factor applicable to consumption period and G1M gas gate (calculated in GAP060).

Consumption information for the appropriate consumption periods for allocation groups 1 and 2 (provided in GAS050, GAS60 and estimated in GAP040).

Processing:

The allocation agent:

• determines which gas gates are G1M gas gates;

- extracts the consumption submissions for allocation groups 1, 2, 3 and 5 for these G1M gas gates;
- extracts the injection information for these G1M gas gates;
- calculates the allocation quantity of each submission by multiplying the consumption figure by the applicable G1M MUFG factor;
- Stores the allocated quantity.

Outputs:

Allocated quantities for allocation groups 1, 2, 3 and 5 (separately not combined) for each G1M gas gate, retailer, contract ID, consumption day in the consumption period, and allocation stage.

Sub-process:	GAP080 Calculate MUFG factors for all gas gates
Process:	Determine allocated quantities
Module reference:	GAU050
Rule references:	46.3.2
Dependencies:	GAS030 GAS040 GAS050 GAS060 GAP030 GAP040 GAP050

The allocation agent calculates the monthly UFG factor (MUFG) for each allocated gas gate, both standard and G1M. However it is only used to calculate allocated quantities for allocation groups 3, 4, 5 and 6, for standard gas gates. It is not used to calculate allocated quantities for G1M gas gates.

The allocation agent publishes the MUFG for every allocated gas gate on the website (GAR070) as well as retaining them for use in the annual determination of G1M gas gates (GAP020).

Business requirements:

- 1. For each consumption period and allocation stage, the allocation agent must calculate and store the MUFG factor for each allocated gas gate.
- 2. The allocation agent must calculate the monthly UFG factor (MUFG) in accordance with the following formula:

$MUFG = (\Sigma EI_d - \Sigma AQ_{1\&2}) / \Sigma CI_{3-6}$

where:

MUFG is the applicable monthly UFG factor for each allocated gas gate for the consumption period.

 ΣEI_d is the sum of the daily metered energy quantities injected at the gas gate for the consumption period provided by the TSO under rule 41 (in GJ).

EAQ182 is the sum of the allocated quantities for allocation groups 1 and 2 for each allocated gas gate, retailer, contract ID, consumption day in the consumption period, and allocation stage output from GAP050 under rule 45.2.3.

ECI₃₋₆ is the sum of the consumption information for allocation groups 3, 4, 5 and 6 for each allocated gas gate for the consumption period provided in accordance with rules 31 to 33 (in GJ), i.e. output from GAS040, GAS050 (allocation group 3 only), GAS060 and estimated in GAP040). If the sum is zero then use **SE**.

Data inputs:

Consumption period.

Allocation stage.

Allocated quantities for allocation groups 1 and 2 for each allocated gas gate, retailer, contract ID, consumption day in the consumption period, and allocation stage (from GAP050).

Consumption information for the appropriate allocated gas gates and consumption period for allocation groups 3, 4, 5 and 6 (from GAS040, GAS050, GAS060 and estimated in GAP040).

Injection information for the allocated gas gates for the appropriate consumption period (GAS030 and estimated in GAP040).

Processing:

The allocation agent:

- extracts the injection information for each allocated gas gate;
- extracts the consumption information for allocation groups 3, 4, 5, and 6 for each allocated gas gate;
- extracts the allocated quantities for allocation groups 1 and 2 for each allocated gas gate;
- calculates and stores the MUFG factor for each allocated gas gate for the consumption period for use in the current allocation process and for the annual determination of G1M gas gates;

N.B. MUFG factors can have negative or zero values.

Outputs:

MUFG factors per standard gas gate for the consumption period and allocation stage.

Exceptions:

If ΣCI_{3-6} in the calculation of MUFG is zero then use ΣEI_d in the calculation of MUFG.

Sub-process:	GAP090 Apply MUFG factors to standard gas gates in allocation groups 3 & 5
Process:	Determine allocated quantities
Module reference:	GAU060
Rule references:	45.2.4
Dependencies:	GAS050 GAS060 GAP020 GAP030 GAP040 GAP080

The allocation agent calculates the allocated quantities for each day in the consumption period for allocation groups 3 and 5 for each standard gas gate (singles and notional delivery points but not the individual gas gates of a notional delivery point), per retailer.

Business requirements:

- 1. For each allocation run the allocation agent must extract only consumption information for allocation groups 3 and 5 for each standard gas gate.
- 2. For each standard gas gate the allocation agent must, for each consumption period and allocation stage, calculate the allocated quantities for allocation groups 3 and 5 (separately not combined) for each retailer, contract ID, profile and consumption day in the consumption period in accordance with the following formula:

AQ_{3&5}= MUFG x CI_{3&5}

where:

AQ_{3&5} is the quantity of gas (in GJ) to be allocated to allocation groups 3 and 5 for the day, retailer, contract ID and profile for each standard gas gate.

MUFG is the applicable standard MUFG factor calculated in accordance with rule 46 (and calculated in GAP080) for each standard gas gate.

CI_{3&5} is the consumption information (in GJ) for allocation groups 3 and 5 for the day, retailer, contract ID and profile provided in accordance with rules 31 to 33 (submitted in GAS050, GAS060 and estimated in GAP040) for each standard gas gate.

Data inputs:

Consumption period.

Allocation stage.

List of standard gas gates applicable to the consumption period (GAP020).

MUFG factor applicable to the consumption period, allocation stage and standard gas gate.

Consumption information (daily) for the appropriate consumption periods but only for allocation groups 3 and 5 (provided in GAS050 and GAS060 and estimated in GAP040) for standard gas gates.
Processing:

The allocation agent:

- determines which gas gates are standard gas gates;
- extracts the appropriate consumption submissions with allocation groups 3 and 5 for standard gas gates;
- multiplies the consumption figures by the applicable MUFG factor;
- stores the allocated quantities for allocation groups 3 and 5.

Outputs:

Allocated quantities for allocation groups 3 and 5 (separately not combined) for each standard gas gate, retailer, contract ID, profile and consumption day in the consumption period and allocation stage.

Sub-process:	GAP100 Calculate the gas gate residual profile
Process:	Determine allocated quantities
Module reference:	GAU070
Rule references:	45.2.5
Dependencies:	GAS030 GAP030 GAP050 GAP070 GAP090

The allocation agent calculates and publishes the gas gate residual profile (GGRP) for each consumption period and allocation stage for each allocated gas gate. The GGRP is the remaining quantity of gas for each day in the consumption period when the allocated quantities for allocation groups 1, 2, 3 and 5 are subtracted from the daily metered energy quantity injected at each allocated gas gate.

Business requirements:

- 1. At each allocated gas gate, for each consumption period and allocation stage, the allocation agent must calculate the GGRP and store it for 'profiling' monthly submissions of allocation groups 4 and 6.
- 2. The allocation agent must calculate the GGRP value for each day, d, in the consumption period and allocation stage by:
 - obtaining the daily metered energy quantity injected for the allocated gas gate for that day (EI_d);
 - aggregating the allocated quantities for all retailers for allocation groups 1,
 2, 3 and 5 for the allocated gas gate for that day;
 - subtracting the allocated quantities from the injection quantity to give the GGRP value for the day (GGRP_d = EI_d AQ_{1,2,3&5,d});
- 3. The profile must be determined by concatenating the GGRP values for each day of the consumption period to give the GGRP for the allocated gas gate

GGRP = GGRP₁, GGRP₂, GGRP_{3,...}, GGRP_{final}.

- 4. Where the calculated quantity for a GGRP value for a day is less than zero it is deemed to be zero for profiling and reporting purposes. The calculated (negative) quantities must be retained for the calculation of the profile total (see GAP110).
- 5. The allocation agent must provide the gas gate residual profile (i.e. GGRP for each day (d) in the consumption period and allocation stage) for each allocated gas gate to retailers (See report GAR040).

Data inputs:

Consumption period.

Allocation stage.

Allocated quantities for allocation groups 1, 2, 3 and 5 for the appropriate consumption period and allocation stage (output from GAP050, GAP070 and GAP090) for every allocated gas gate.

Injection information for the appropriate consumption period (GAS030 and GAP040).

Processing:

The allocation agent:

- extracts the appropriate allocated quantities for allocation groups 1, 2, 3 and 5 for all allocated gas gates;
- extracts the daily injected quantities of all allocated gas gates;
- calculates the GGRP value for each day in the consumption period and allocation stage;
- stores the GGRP for use in the allocation process.

Outputs:

GGRP values for each day, for every allocated gas gate for the consumption period and allocation stage. (Each profile can be thought of as a vector of daily values applicable to a consumption period, allocation stage and allocated gas gate.)

Sub-process:	GAP110 Profile allocation groups 4 & 6 and apply MUFG factors
Process:	Determine allocated quantities
Module reference:	GAU080
Rule references:	45.2.6 45.2.6A
Dependencies:	GAP020 GAP030 GAP040 GAP060 GAP080 GAP100

For each allocated gas gate the allocation agent profiles the monthly consumption submissions of allocation groups 4 and 6 into daily quantities by using the gas gate residual profile. The gas gate residual profile quantities are the remaining quantities of gas that need to be allocated to retailers once the daily allocated quantities for allocation groups 1, 2, 3 and 5 have been subtracted from the daily metered energy quantity injected at the allocated gas gate. Once the daily value has been derived, the appropriate monthly UFG factor (MUFG for standard gas gates, and G1M MUFG for G1M gas gates) is applied and the daily allocated quantity is calculated.

Business requirements:

- 1. For each consumption period and allocation stage, the allocation agent must calculate the allocated quantities for allocation groups 4 and 6 for each allocated gas gate, retailer, contract ID and consumption day in the consumption period, using the gas gate residual profile calculated in GAP100 of the allocated gas gate indicated in the submission.
- 2. The allocation agent must calculate the daily allocation quantities for allocation groups 4 and 6 (separately not combined) by:
 - extracting the appropriate gas gate residual profile and summing all the daily values of the gas gate residual profile, giving the profile total **EGGRPd(1,2...last)**. This is the total before the zero-floor is applied in GAP100, i.e. it includes any negative gas gate residual profile values.
 - calculating a particular day's profile factor by dividing that day's profile value by the profile total calculated above:

GGRPd(1,2...last)/ΣGGRPd(1,2...last)

The day's profile value is taken after the zero-floor is applied to the gas gate residual profile, i.e. it cannot be negative.

• multiplying the monthly submission consumption quantity (for the relevant allocation group, retailer and contract ID) by the profile factor, giving the daily profiled consumption quantity for each day d:

$DPCQd = \Sigma CI4\&6 \times GGRPd(1,2...last) / \Sigma GGRPd(1,2...last)$

 multiplying the daily profiled consumption quantity (DPCQd) by the applicable monthly UFG factor for each allocated gas gate giving a day's allocated quantity per allocation group:

AQd,4&6 = (MUFG or G1M MUFG) x DPCQd

Data inputs:

Consumption period.

Allocation stage.

List of G1M gas gates applicable to the consumption period (GAP020).

List of standard gas gates applicable to the consumption period (GAP020).

Consumption information for allocation groups 4 and 6 for the appropriate consumption period and allocation stage from retailers (GAS040 and estimated in GAP040).

Gas gate residual profile per gas gate calculated in this run in GAP100.

MUFG factor or G1M MUFG factor applicable to the consumption period, allocation stage and allocated gas gate (from GAP060 and GAP080).

Processing:

The allocation agent:

- determines from the type of gas gate which MUFG factor to apply;
- calculates the daily allocation quantities;
- outputs (i.e. generates new) daily allocated quantities for allocation groups 4 and 6 using data from the consumption information and the values from the above calculations **DPCQd** and **AQd,4&6** and includes the appropriate day.

Outputs:

Allocated quantities for allocation groups 4 and 6 (separately not combined) for each allocated gas gate, retailer, contract ID and day in the consumption period and allocation stage.

Exceptions:

Sub-process:	GAP120 Recalculate mismatched allocated quantities
Process:	Adjust allocated quantities
Module reference:	GAU100
Rule references:	45.2.7, Schedule 2
Dependencies:	GAS020 GAS060 GAP020 GAP030 GAP050 GAP070 GAP090

This process is used to ensure that the sum of the allocated quantities equals the injection quantity at the allocated gas gate and is applied when

a) the sum of the (non-zero) allocated quantities at an allocated gas gate for a day does not equal the (non-zero) injection quantity, or

b) there is (non-zero) injection at a gas gate for a day but the total consumption is zero. Total consumption may be zero because zero quantities were submitted by the retailer and/or zero quantities were returned by the estimation process.

Business requirements:

1. The allocation agent must allocate the residual injection accordingly: CASE A

Where the (non-zero) total allocated quantities for a day are less than or greater than the (non-zero) daily injection quantity the allocation agent must scale each retailer's daily allocation up or down respectively so that the allocated quantities match the injection quantity.

The allocated quantities for the day at the allocated gas gate must be scaled in accordance with the following formula:

$SAQ_{r,g} = AQ_{r,g} + (EI_d - \Sigma AQ_{r,g}) \times (AQ_{r,g} / \Sigma AQ_{r,g})$

where:

SAQ_{r,g} is the scaled quantity of gas in GJ allocated to retailer r for allocation group g for the day;

AQ_{r,g} is the allocated quantity (in GJ) allocated to retailer r for allocation group g for the day;

EI_d is the daily metered injection quantity in GJ provided by the TSO or estimated for the day;

 $\Sigma AQ_{r,q}$ is the sum of all allocated quantities (in GJ) across all retailers and all allocation groups for the day.

CASE B

Where for the day in question,

- the retailers trading gas at the allocated gas gate; and
- the allocation groups for which they are submitting consumption; and
- the contract IDs under which they are trading •

are the same as those for the entire previous (i.e. immediately prior) consumption period and the sum of allocated quantities in the previous consumption period is not zero, then the daily injection quantity must be allocated to each retailer, allocation group and contract ID in proportion to that retailer's average daily allocation for that allocation group and contract ID over the sum of all retailers' average daily allocations that were recorded for the previous consumption period, in accordance with the following formula:

 $AQ_{r,g,c,d} = EI_d \times (PAQ_{r,g,c} / \Sigma PAQ_{r,g,c})$

where:

 $\mathbf{AQ}_{r,g,c,d}$ is the quantity of gas (in GJ) to be allocated to retailer r for allocation group g and contract ID c, for day d;

 \mathbf{EI}_{d} is the actual daily energy injection quantity (in GJ) provided by the TSO or estimated for day d;

 $\textbf{PAQ}_{r,g,c}$ is the average daily allocated quantity (in GJ) for the previous consumption period for retailer r, allocation group g and contract ID c; and

 $\pmb{\Sigma} PAQ_{r,g,c}$ is the sum of $PAQ_{r,g,c}$ (in GJ) for all retailers r, allocation groups g and contract IDs c.

CASE C

In all other circumstances the daily injection quantity must be allocated equally to all retailers trading gas in the current consumption period. The allocation per retailer must then be split equally amongst the contract IDs traded under by the retailer, and then by the number of allocation groups under each of the contract IDs, in the current consumption period. The allocation must be in accordance with the following formula:

 $AQ_{r,c,g,d} = EI_d / (N_r \times N_c \times N_g)$

where:

g is the allocation group 1,2,3,4,5 or 6;

AQ_{r,c,g,d} is the quantity of gas (in GJ) to be allocated to retailer r for allocation group g and contract ID c, for day d;. The applicable retailers and allocation groups are those that were submitted and estimated by the system in this consumption period.

 \mathbf{EI}_d is the daily metered energy quantity (in GJ) provided by the TSO or estimated for day d.

 \boldsymbol{N}_{r} is the number of retailers supplying gas to consumer installations at the allocated gas gate for day d.

 $\boldsymbol{N}_{\boldsymbol{c}}$ is the number of active contract IDs for retailer r at the gas gate for day d; and

 $\mathbf{N}_{\mathbf{g}}$ is the number of allocation groups submitted by retailer r or estimated by the system under contract ID c for day d.

2. All of the injection quantities submitted during the relevant consumption period must be allocated to the consumer installations in allocation groups 1, 2, 3, 4, 5 or 6 at that gas gate.

Data inputs:

Consumption period and allocation stage. Trader information (GAS020). Consumption information for the current consumption period (GAS040, GAS050, GAS060 and GAP040).

Injection information from TSOs for the current consumption periods (GAS030 and estimated in GAP040).

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 (separately, not combined) for each allocated gas gate, retailer, contract ID, consumption day in the current and previous consumption period, and latest allocation stage (GAP050, GAP070 and GAP090).

N.B. For allocated quantities of allocation groups 1, 2 the system extracts the appropriate allocated quantities dependent on the type of allocated gas gate (GAP020).

Processing:

For the consumption period, allocation stage and qualifying allocated gas gate, the allocation agent:

- determines whether each retailer's consumption information is zero for this consumption period and allocation stage by allocation group;
- obtains each retailer's previous month's allocations by allocation group and consumption day and calculates the daily average for each retailer;
- summarises each retailer's allocated quantities for this consumption period and allocation stage by allocation group;
- where the allocated quantities for the current consumption period are not zero, scales the allocated quantities using the formula above;
- where the consumption submissions are zero, calculates new allocated quantities for each retailer using the appropriate formula above.

Outputs:

New or scaled allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 (separately, not combined) for each allocated gas gate, retailer, contract ID, consumption day in the consumption period, and allocation stage.

Example of use of **CASE B** clause 5, where the daily injection is 3000GJ:

Retailer	Allocation Group	Contract ID	Daily Average Allocation of Previous Consumption Period	This day in the consumption period's submission totals	AQ _{r,g} for the day
RETA	1	1110	500	0	750
RETA	2	1110	100	0	150
RETA	2	1120	200	0	300
RETB	1	1200	200	0	300
RETB	4	1200	700	0	1050
RETC	4	1300	300	0	450
TOTAL (AQ _{total})			2000		3000

Example of use of CASE B clause 6, where the daily injection is 3000GJ

Retailer	Allocation Group	Contract ID	Daily Average Allocation of Previous Consumption Period	This day in the consumption period's submission totals	AQ _{r,g} for the day
RETA	1	1110	500	0	250
RETA	2	1110	100	0	250
RETA	2	1120	200	0	500
RETB	1	1200	200	No entry	0
RETB	4	1200	700	0	1000
RETC	4	1300	300	0	1000
TOTAL (AQ _{total})			2000		3000

Sub-process:	GAP130 Calculate the daily average consumption per ICP
Process:	Prepare for next consumption period
Module reference:	GAU090
Rule references:	
Dependencies:	GAS050 GAP040

In order to be able to estimate missing consumption information for ICPs in allocation groups 1, 2 and 3, the system calculates the average daily business day consumption quantity and the average daily non-business day consumption quantity for the days each ICP was supplied, for possible use in the next consumption period's estimation process. Should they be required in the next consumption period, these averages will be adjusted to account for seasonality, as described in GAP040.

Business requirements:

- 1. For each consumption period and allocation stage, the allocation agent must calculate the daily average business day quantities and daily average non-business day quantities for each ICP in allocation groups 1, 2 and 3.
- 2. The allocation agent may also derive the retailer that is expected to provide submission information in the next consumption period by storing the retailer that submitted consumption on the last consumption day.

Data inputs:

Consumption period.

Allocation stage.

Consumption information for allocation groups 1, 2 and 3 for the appropriate consumption period and allocation stage from retailers for all allocated gas gates (GAS050 and estimated in GAP040).

Processing:

The allocation agent:

- calculates the daily average business day quantity of each ICP using the daily consumption quantities of each business day in the consumption period and dividing by the total number of business days in the consumption period.
- calculates the daily average non-business day quantity of each ICP using the daily consumption quantities of each non-business day in the consumption period and dividing by the total number of non-business days in the consumption period.
- derives the last retailer that supplied consumption information for the ICP from the submission for the last day.

Outputs:

Daily average quantities of ICPs – includes the daily average business day and nonbusiness day quantities per ICP together with the last retailer.

Sub-process:	GAR010 Report daily retailer allocation and UFG
Process:	Generate monthly allocation & reconciliation reports
Destination:	Retailers (and distributors with agreement of retailers)
Rule references:	45.2.8,48.2.2, 49.2.2, 50.2.2, 51
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

This report details the allocation at a daily aggregation level.

Business requirements:

- 1. The allocation agent must provide a report setting out the daily quantities of gas allocated to each retailer (and distributor if permitted) at each allocated gas gate for each consumption period:
 - by 1200 hours on the 5th business day of each month for the initial allocation (rule 48.2.2), and
 - by 0800 hours on the 11th business day of each month for the interim allocation (rule 49.2.2), and
 - by 0800 hours on the 16th business day of each month for the final allocation (rule 50.2.2), and
 - the time instructed by Gas Industry Co for special allocations (rule 51).
- 2. The allocation agent must ensure that only the retailer's own information is included in each retailer's report.
- 3. The allocation agent must make the information available to distributors as soon as practicable after retailers have received their information and only of information permitted by retailers.
- 4. The allocation agent must ensure that only information for the particular networks owned by each distributor is given to that distributor.

Data inputs:

Consumption period.

Allocation stage.

Submission information for all allocation groups (GAS040, GAS050 and GAS060). Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 output from GAP050,

GAP070, GAP090, GAP100 and GAP120.

Trader information access permissions.

Processing:

The allocation agent:

- Aggregates consumption information (CI) and allocated quantities (AQ) by:
 - o consumption period,
 - \circ allocation stage
 - o allocation participant

- allocated gas gate
- contract ID and
- consumption day
- calculates the UFG quantity allocated by subtracting the aggregate original consumption from the allocated quantity (AQ-CI).
- sets the estimate indicator to 'E' for each aggregate if any of the allocation groups 1 and 2 submissions used in the aggregation contained estimated figures and/or the allocation agent used estimated figures in lieu of missing data from retailers or TSOs i.e. if allocation agent is notified that the GAS050 file contains an estimate for allocation groups 1 or 2 and/or if the allocation agent calculated an estimate.
- formats the report for each aggregate.

N.B. The allocated gas gates in this report will be the singles and notional delivery points not the individual gas gates that are part of a notional delivery point.

Outputs:

Daily retailer allocation and UFG report format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR010″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	Μ	Valid code of retailer for reports sent only to retailers, or "APAR" for reports sent to distributors
Recipient	Char (4)	М	Valid code of retailer or distributor
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which consumption information applies
Allocation Stage	Char(1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate

Allocation Group	Num (1)	М	Allocation group (1 to 6)
Contract ID	Char (8)	Μ	Contract ID for gas transmission contract.
Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the allocation has been made
Allocation for Consumption Day (GJ)	Num (10.3)	М	Aggregated
UFG Allocated for Consumption Day (GJ)	Num (10.3)	М	Calculated
Estimate Indicator	Char (1)	0	"E" if estimated data in GAS050 submission file and/or allocation agent has estimated data in lieu of missing data from retailer or TSO, else blank

Example (Daily Allocation):	HDR,GAR010,ALLA,RETA,RETA,06/11/2008,12:32:02,2 DET,10/2008,I,RETA,TWA35610,NETA,4,1109,01/10/2008,759.025,2.314,E DET,10/2008,I,RETA,TWA35610,NETA,4,1109.02/10/2008,712,351,1.896
	Etc

Sub-process:	GAR020 Report monthly retailer allocation and UFG
Process:	Generate monthly allocation & reconciliation reports
Destination:	Retailers (and distributors with agreement of retailers)
Rule references:	45.2.8,48.2.2, 49.2.2, 50.2.2, 51
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

This report details the allocation at a monthly aggregation level.

Business requirements:

- 1. The allocation agent must provide a report setting out the monthly quantities of gas allocated to each retailer (and distributor if permitted) at each allocated gas gate for each consumption period:
 - by 1200 hours on the 5th business day of each month for the initial allocation (rule 48.2.2), and
 - by 0800 hours on the 11th business day of each month for the interim allocation (rule 49.2.2), and
 - by 0800 hours on the 16th business day of each month for the final allocation (rule 50.2.2), and
 - the time instructed by Gas Industry Co for special allocations (rule 51).
- 2. The allocation agent must ensure that only the retailer's own information is included in each retailer's report.
- 3. The allocation agent must make the information available to distributors as soon as practicable after retailers have received their information and only of information permitted by retailers.
- 4. The allocation agent must ensure that only information for the particular networks owned by each distributor is given to that distributor.

Data inputs:

Consumption period.

Allocation stage.

Submission information for all allocation groups (GAS040, GAS050 and GAS060).

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 output from GAP050, GAP070, GAP090, GAP100 and GAP120.

Trader information access permissions.

Processing:

The allocation agent:

- Aggregates consumption information (CI) and allocated quantities (AQ) by:
 - consumption period,
 - \circ allocation stage
 - \circ allocation participant and

- o gas gate
- calculates the UFG quantity for each aggregate by subtracting the aggregate original consumption from the allocated quantity (AQ-CI);
- sets the estimate indicator to 'E' for each aggregate if any of the allocation groups 1 and 2 submissions used in the aggregation contained estimated figures and/or the allocation agent used estimated figures in lieu of missing data from retailers or TSOs i.e. if allocation agent is notified that the GAS050 file contains an estimate for allocation groups 1 or 2 and/or if the allocation agent calculated an estimate;
- formats the report for each aggregate;
- filters the output appropriately for each recipient.

N.B. The allocated gas gates in this report will be the singles and notional delivery points not the individual gas gates that are part of a notional delivery point.

Outputs:

Monthly retailer allocation and UFG report format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR020″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	М	Valid code of retailer for reports sent only to retailers, or "APAR" for reports sent to distributors
Recipient	Char (4)	М	Valid code of retailer or distributor
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which consumption information applies
Allocation Stage	Char(1)	М	 I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate
Allocation Group	Num (1)	М	Allocation group (1 to 6)

Allocation for Consumption Period (GJ)	Num (10.3)	Μ	Aggregated
UFG Allocated for Consumption Period (GJ)	Num (10.3)	Μ	Calculated
Estimate Indicator	Char (1)	0	"E" if estimated data in GAS050 submission file and/or allocation agent has estimated data in lieu of missing data from retailer or TSO, else blank

Example (Monthly	HDR,GAR020,ALLA,RETA,RETA,06/11/2008,12:32:02,2
Allocation):	DET,10/2008,I,RETA,TWA35610,NETA,4,759.025,2.314,E
Anocacionyi	DET,10/2008,I,RETA,HST05210,NETA,4,712.351,1.896
	Etc

Sub-process:	GAR030 Report annual retailer allocation and UFG
Process:	Generate monthly allocation & reconciliation reports
Destination:	Retailers (and distributors with agreement of retailers)
Rule references:	45.2.8,48.2.2, 49.2.2, 50.2.2, 51
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

This report details the allocation at a rolling annual aggregation level.

Business requirements:

- 1. The allocation agent must provide the rolling annual allocation report to each retailer (and distributor if permitted) for each consumption period:
 - by 1200 hours on the 5th business day of each month for the initial allocation, and
 - by 0800 hours on the 11th business day of each month for the interim allocation, and
 - by 0800 hours on the 16th business day of each month for the final allocation, and
 - the time instructed by Gas Industry Co for special allocations.
- 2. The report must aggregate information for each allocated gas gate for the consumption period being processed and for the preceding 11 months.
- 3. The allocation agent must ensure that only the retailer's own information is included in each retailer's report.
- 4. The allocation agent must make the information available to distributors as soon as practicable after retailers have received their information and only of information permitted by retailers.
- 5. The allocation agent must ensure that only information for the particular networks owned by each distributor is given to that distributor.

Data inputs:

Consumption period being processed.

Allocation stage.

Submission information for all allocation groups (GAS040, GAS050 and GAS060) for previous 12 consumption periods.

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 output from GAP050, GAP070, GAP090, GAP100 and GAP120 for previous 12 consumption periods. Trader information access permissions.

Processing:

The allocation agent:

Aggregates consumption information (CI) and allocated quantities (AQ) by:
 allocation participant and

- allocated gas gate
- calculates the UFG quantity for each aggregate by subtracting the aggregate original consumption from the allocated quantity (AQ-CI);
- sets the estimate indicator to 'E' for each aggregate if any of the allocation groups 1 and 2 submissions used in the aggregation contained estimated figures and/or the allocation agent used estimated figures in lieu of missing data from retailers or TSOs i.e. if allocation agent is notified that the GAS050 file contains an estimate for allocation groups 1 or 2 and/or if the allocation agent calculated an estimate;
- formats the report for each aggregate;

N.B. The allocation stage output in this report is the stage associated with the consumption period being processed.

Outputs:

Annual allocation and UFG report format:

File Forma	t:
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Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR030″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	Μ	Valid code of retailer for reports sent only to retailers, or "APAR" for reports sent to distributors
Recipient	Char (4)	М	Valid code of retailer or distributor
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Last calendar month to which consumption information applies
Allocation Stage	Char(1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate
Allocation Group	Num (1)	М	Allocation group (1 to 6)
Allocation for year up to and including	Num (10.3)	М	Aggregated

Consumption Period (GJ)			
UFG allocated for year up to and including Consumption Period (GJ)	Num (10.3)	Μ	Calculated
Estimate Indicator	Char (1)	0	"E" if estimated data in GAS050 submission file and/or allocation agent has estimated data in lieu of missing data from retailer or TSO, else blank

Example (Annual Allocation):	HDR,GAR030,ALLA,RETA,RETA,06/11/2008,12:32:02,2 DET,10/2008,I,RETA,TWA35610,NETA,4,759.025,2.314,E DET,10/2008,I,RETA,HST05210,NETA,4,712.351,1.896
	Etc

Sub-process:	GAR040 Report gas gate residual profile shapes
Process:	Generate monthly allocation & reconciliation reports
Destination:	Retailers (and distributors with agreement of retailers)
Rule references:	48.2.2, 49.2.2, 50.2.2, 51
Dependencies:	GAP110

The allocation agent provides the gas gate residual profile to each retailer (and distributor if permitted).

Business requirements:

- 1. The allocation agent must provide the gas gate residual profile (daily values) to each retailer and distributor (if permitted) for each consumption period, allocation stage and allocated gas gate. Where allocation occurs at a notional delivery point, the gas gate residual profile will be published for that notional delivery point and not at the individual gas gates comprising that notional delivery point.
- 2. The allocation agent must provide the report to each retailer:
 - by 1200 hours on the 5th business day of each month for the initial allocation (rule 48.2.2), and
 - by 0800 hours on the 11th business day of each month for the interim allocation (rule 49.2.2), and
 - by 0800 hours on the 16th business day of each month for the final allocation (rule 50.2.2), and
 - the time instructed by Gas Industry Co for special allocations (rule 51).
- 3. The allocation agent must ensure that retailers only receive the gas gate residual profile for allocated gas gates where they have a trading notification.
- 4. The allocation agent must make the information available to distributors as soon as practicable after retailers have received their information and only of information permitted by retailers.
- 5. The allocation agent must ensure that only information for the particular networks owned by each distributor is given to that distributor.

Data inputs:

Consumption period.

Allocation stage.

Reference data.

Daily gas gate injection quantities from GAS030.

Gas gate residual profile per consumption period, allocation stage and gas gate output from GAP110.

Processing:

The allocation agent:

- uses the gas gate residual profile per consumption period, allocation stage and allocated gas gate output from GAP070 and the gas gate injection quantities to calculate the gas gate residual profile percentage by dividing the appropriate day's gas gate residual profile value (GGRPd) by the total gas gate injection quantity for the month (ΣEId) i.e. GGRPd/ ΣEId ;
- formats the report.

Outputs:

Gas gate residual profile report format:

Description	Туре	M/0	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR040″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	Μ	Valid code of retailer for reports sent only to retailers, or "APAR" for reports sent to distributors
Recipient	Char (4)	М	Valid code of retailer or distributor
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which information applies
Allocation Stage	Char(1)	Μ	 I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate
Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the information applies
Gas Gate Residual Profile (GJ)	Num (10.3)	Μ	Gas gate residual profile expressed in GJ
Gas Gate Residual Profile (%)	Num (3.4) percentage	М	Gas gate residual profile expressed as percentage of monthly gas injections

Example (Gas Gate Residual Profile):	HDR, GAR040,ALLA,RETA,RETA,06/11/2008,12:32:02,2 DET,10/2008,I,TWA35610,NETA,01/10/2008,152.068,12.4567 DET 10/2008 J TWA35610 NETA 02/10/2008 143 025 11 75
	Etc

Sub-process:	GAR050 Report initial versus final consumption comparison
Process:	Generate monthly allocation & reconciliation reports
Destination:	Retailers, Gas Industry Co (and distributors with agreement of retailers)
Rule references:	51.1, 53.3
Dependencies:	GAS010, GAS040, GAS050, GAS060

Each month, beginning December 2009, the allocation agent provides a report to each retailer, distributor (if permitted) and Gas Industry Co, comparing initial submissions with final submissions for all retailers.

Business requirements:

- 1. The allocation agent must report to retailers and Gas Industry Co (and distributors if permitted) on the percentage of error in the accuracy for each allocated gas gate between:
 - the aggregated consumption information for consumer installations in allocation groups 3 to 6 provided under rule 31 by each retailer to the allocation agent for initial allocation; and
 - the aggregated consumption information for consumer installations in allocation groups 3 to 6 provided under rule 33 by each retailer to the allocation agent for final allocation.
- 2. The allocation agent must provide the report by 1200 hours on the 5th business day of each month, in respect of each consumption period for which a final allocation has been performed in the previous 12 months (N.B. The reference to "previous 12 months" is intended to relate to the "final allocations performed in the previous 12 months" and not the original consumption period when initial consumption information was submitted).
- 3. The allocation agent must make the information available to distributors as soon as practicable after retailers have received their information and only of information permitted by retailers.
- 4. The allocation agent must ensure that only information for the particular networks owned by each distributor is given to that distributor.
- 5. Where Gas Industry Co has directed the allocation agent to perform a special allocation and specifies that the special allocation *replaces* either an initial allocation or a final allocation, then the quantities submitted for the special allocation must be the quantities used in the calculation of percentage variation.

Data inputs:

Consumption information submissions provided in GAS040, GAS050 and GAS060 for allocation groups 3, 4, 5, or 6, which have been used in final allocations that were processed within the previous 12 months.

For those same consumption periods that have had an allocation stage of final processed (see above), the consumption information submissions for allocation groups 3, 4, 5, or 6 that have been processed in the initial allocation stage.

Trader information access permissions.

Processing:

The allocation agent:

- aggregates the consumption quantities (per consumption period, allocated gas gate and allocation participant) for the final allocation and for the initial allocation;
- file matches on the key;
- calculates the percentage variation;
- formats the report.

Where the final consumption quantity, aggregated as defined above, is zero, the percentage variation for this consumption period, allocated gas gate and allocation participant is defined as zero.

Where the final consumption quantity, aggregated as defined above, is null, the percentage variation for this consumption period, allocated gas gate and allocation participant is also null.

Outputs:

Initial versus final submission comparison report format:

Description	Туре	M/0	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR050″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	М	"APAR"
Recipient	Char (4)	М	Valid code of recipient
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Last Consumption Period	MM/YYYY	Μ	Last calendar month to which consumption information applies
Allocation Participant	Char (4)	Μ	Valid code of retailer
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate

Initial Consumption (GJ)	Num (10.3)	М	Aggregated consumption for allocation groups 3 to 6 as reported to the allocation agent and expressed in GJ
Final Consumption (GJ)	Num (10.3)	Μ	Aggregated consumption for allocation groups 3 to 6 as reported to the allocation agent and expressed in GJ
Percentage Variation (%)	Num (3.2) percentage	Μ	Calculated percentage variation between the final and initial allocations. If $\Sigma CI_F=0$, PV is defined as 0 If $\Sigma CI_F=null$, PV is defined as null

Example (Initial v Final Submission	HDR,GAR050,ALLA,APAR,RETA,24/11/2008,12:32:02,2 DET,10/2007,RETA,TWA35610,NETA,759.025,795.528,4.81 DET 10/2007, RETA,HST05210,NETA, 445,05,470,512,5,72
Comparison Data):	DE1,10/2007,RE1A,115105210,NE1A,445.05,470.512,5.72

Sub-process:	GAR060 Report seasonal adjustment daily shape values
Process:	Generate monthly allocation & reconciliation reports
Destination:	Public website
Rule references:	53.1
Dependencies:	GAS030 GAP050 GAP070 GAP100

The allocation agent publishes the seasonal adjustment daily shape values (SADSV) for the consumption period being allocated and the previous 23 consumption periods (in which allocations have occurred – i.e. from 1 October 2008) for every allocated gas gate.

The SADSV are the remaining quantities of gas for each day in the consumption period when the allocated quantities for allocation groups 1 and 2 are subtracted from the daily metered energy quantity injected at each allocated gas gate. The SADSV for the consumption period are aggregated with the SADSV for the previous 23 consumption periods and published on the allocation agent website.

Although the Rules require publication no later than 1 business day after the allocation, the GAR060 report is typically published at the same time as the allocation results.

Business requirements:

- 1. Pursuant to the exemption granted by Gas Industry Co, for consumption periods up to and including September 2013, the SADSV will be calculated using the same formula as the GGRP.
- The allocation agent must publish the SADSV for every allocated gas gate by no later than 1 business day after each initial, interim, final or special allocation, that is:
 - by 1700 hours on the 6th business day of each month for the initial allocation, and
 - by 1700 hours on the 12th business day of each month for the interim allocation, and
 - by 1700 hours on the 17th business day of each month for the final allocation, and
 - by 1700 hours on the business day after a special allocation is published
- 3. The allocation agent must derive the SADSV for each consumption period and allocation stage at each allocated gas gate according to the following formula:

$(SADSV_d = EI_d - AQ_{1\&2,d})$

where EI_d is the daily metered injected quantity in GJ and AQ_{1&2,d} is the sum of the daily allocated quantities in GJ for allocation groups 1 and 2 for day d of the consumption period.

4. For each allocated gas gate, the SADSV for the current consumption period must be calculated as the sum of the SADSV for each day in the current consumption period.

- 5. For each allocated gas gate, the SADSV for the current consumption period must be aggregated with the SADSV for the 23 preceding consumption periods and published on the allocation agent.
- 6. The SADSV for the previous 23 consumption periods must be the values from the most recent allocation of each of the 23 consumption periods (i.e. the report will contain a mix of SADSV from initial, interim, final and special allocations).

Data inputs:

Consumption period.

Allocation stage.

Daily ICP submissions per consumption period, allocation stage and allocated gas gate output from GAS050.

Gas gate publication exemption list.

Processing:

The allocation agent:

- calculates the SADSV for each day in the current consumption period,
- totals all the SADSV for the current consumption period,
- aggregates the SADSV for the current consumption period with the SADSV from each of the 23 previous consumption periods,
- formats and publishes the report.

Outputs:

SADSV report format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR060″
Sender	Char (4)	М	"ALLA" (code of allocation agent)
Allocation Participant	Char (4)	М	"APAR"
Recipient	Char (4)	М	″GASW″
Report Run Date	DD/MM/YYYY	М	Date the report was created
Report Run Time	HH:MM:SS	М	Time the report was created
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Gas Gate	Char (8)	М	Valid gas gate code
Network Code	Char (4)	М	Valid network code at gas gate

Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the information applies
Seasonal Adjustment Daily Shape Value (GJ)	Num (10.3)	Μ	Daily gas gate residual profile value expressed in GJ

Example (SADSV report):	HDR,GAR060,ALLA,APAR,GASW,06/11/2008,12:32:02,2 DET,TWA35610,NETA,01/10/2008,12.450 DET,TWA35610,NETA,02/10/2008,11,750
	Etc

Sub-process:	GAR070 Report summary UFG and retailer allocation
Process:	Generate monthly allocation & reconciliation reports
Destination:	Public website
Rule references:	46.4, 53.2.1, 53.2.2, 53.2.3
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

Every month the allocation agent publishes a summary UFG report to the website for the initial, interim and final allocations for every allocated gas gate.

Business requirements:

- 1. The allocation agent must publish the summary UFG and allocation report for each allocation performed by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. This report is published on these dates as specified in rule 46.4.1. Accordingly the information required by rule 53.2 will also be published in this report on these dates (i.e. in advance of the timeframe specified in rule 53.2).
- 3. For each consumption period, allocation stage and allocated gas gate the report must show at least:
 - the monthly total injection quantity; and
 - both the monthly total quantity and the rolling total annual quantity of UFG and UFG percentage; and
 - the monthly UFG factor for non-G1M gas gates; and
 - the G1M monthly UFG factor for G1M gas gates; and
 - the monthly total allocations for each retailer.
- 4. This report must show all retailers' allocations.
- 5. Information must be published for every allocated gas gate.

Data inputs:

Consumption period.

Allocation stage.

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 for the consumption period and allocation stage being processed.

Latest allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 for the preceding 11 months.

Consumption information provided in GAS040, GAS050 and GAS060 for allocation groups 1, 2, 3, 4, 5, and 6.

Injection information from TSOs for the appropriate 12 consumption periods and latest allocation stages (GAS030).

AUFG factors per gas gate and gas year (output from GAP030).

MUFG factors or G1M_MUFG factors per allocated gas gate for the consumption period and allocation stage (output from GAP050).

Processing:

The allocation agent:

• formats the report according to the details given in the file format section below.

Outputs:

Summary UFG and allocation report format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR070″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR"
Recipient	Char (4)	М	"GASW"
Report Run Date	DD/MM/YYYY	М	Date the report is created
Report Run Time	HH:MM:SS	М	Time the report is created
Number of Records	Num (6)	М	Total number of detail records in report.

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Consumption period
Allocation Stage	Char (1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Gas Gate	Char (8)	М	Gas gate code.
Network Code	Char(4)	М	Valid network code at the gas gate.
Gas Gate Injected Quantity Total for Consumption Period	Num (10.3)	М	Total injected quantity at gas gate in GJ for the gas gate, consumption period and allocation stage submitted via GAS030.
Gas Gate Annual UFG Factor	Num (5.4)	М	Annual UFG factor (AUFG) used for allocation groups 1 and 2 for the gas gate, consumption period and allocation stage output from GAP030.

Gas Gate Monthly UFG/G1M Monthly UFG Factor	Num (5.6)	Μ	Monthly UFG factor (MUFG) or G1M Monthly UFG factor (G1M MUFG) for the gas gate, consumption period and allocation stage output from GAP050.
Gas Gate UFG Total for Month	Num (10.3)	Μ	Total UFG expressed in GJ for the gas gate, consumption period and allocation stage, being the difference between the total injection quantity and total consumption information quantities at the gas gate for the consumption period and allocation stage.
Gas Gate UFG % for Month	Num (3.2) (percentage)	Μ	This is the gas gate UFG total for the current month (see above) expressed as a % of the total gas gate injection quantity for the gas gate, consumption period and allocation stage.
Gas Gate UFG Total for Previous 12 Months	Num (10.3)	Μ	The is the sum of the gas gate UFG totals of each of the previous 12 months, up to and including the consumption period, expressed in GJ. See Gas Gate UFG Total for Month above but the aggregation is of the 12 previous months.
Gas Gate UFG % for Previous 12 Months	Num (3.2) (percentage)	Μ	This is the gas gate UFG total for previous 12 months (see above) expressed as a % of the total gas gate injection quantity of the previous 12 months.
Allocation Participant	Char (4)	М	Retailer code of the allocated quantity being aggregated.
Retailer Allocation Results for Month	Num (10.3)	Μ	Quantity allocated to retailer in GJ in the consumption period and allocation stage for the gas gate. Obtained from the allocated quantities output from GAP040, GAP060 and GAP080.

Example	HDR, GAR070, ALLA, APAR, GASW, 06/11/2008, 12:32:02, 2 DET, 10/2008, I, TWA35610, NETA, 158976.321, 1.0153, 1.32, 148.369, 2.59, 63.2 41, 0.36, RETA, 48.325
	DE1,10/2008,1,1WA35610,NETA,158976.321,1.0153,1.32,148.369,2.59,63.2 41,0.36,RETB,26.649 Etc

Sub-process:	GAR080 Report billed versus consumption comparison
Process:	Generate monthly allocation & reconciliation reports
Destination:	Public website
Rule references:	52.2.2, 52.2.3 (see also 31, 32, 33)
Dependencies:	GAS040, GAS050, GAS060, GAS070

This report compares the quantities of gas billed to consumers with the quantities submitted as consumption information over a 12 month period.

Billing information lags consumption information by one month.

This report is for every allocated gas gate.

Business requirements:

- The allocation agent must compare, for each retailer and allocated gas gates, the total quantities billed over the previous 12 consumption periods with the associated consumption information (i.e. the consumption information submitted to the allocation agent for the previous 13th through to the previous 2nd consumption periods), by 1700 hours on the 13th business day of each month and publish the results by 0800 hours on the 14th business day.
- 2. The allocation agent must compare:
 - the sum of the quantities billed for the previous 12 consumption periods billed, provided by each retailer for each allocated gas gate via GAS070 (i.e. the sum of the "actual sales" for the previous 12 "months billed" in the GAS070 file) (rule 52.2.1); with
 - the sum of the consumption information associated with the quantities billed, provided by each retailer for each allocated gas gate (rules 31 to 33).

E.g. On the 13th business day in January 2010, this report will compare the sum of the quantities billed (provided in GAS070) for the months of January 2009 through to December 2009 inclusive, with the sum of the consumption information submitted for the consumption periods December 2008 through to November 2009. The "Last Consumption Period" detailed in the report will be November 2009.

- 3. The allocation agent must publish the results of the comparison by 0800 hours on the 14th business day of each month.
- 4. This report must show all retailers' results.
- 5. Information must be published for every allocated gas gate.

Data inputs:

Consumption period.

Allocation stage.

Submission information for the each consumption period with the latest allocation stage for the relevant 12 months (GAS040, GAS050, GAS060).

Valid as-billed information (from GAS070) for the relevant 12 months.

Processing:

The allocation agent:

• formats the report using the calculations detailed in the file format section below.

Outputs:

Rolling annual reconciliation report format:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR080″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR"
Recipient	Char (4)	М	"GASW"
Report Run Date	DD/MM/YYYY	М	Date the report is created
Report Run Time	HH:MM:SS	М	Time the report is created
Number of Records	Num (6)	М	Total number of detail records in report.

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Last Consumption Period Billed	MM/YYYY	М	Last consumption period to which the data in this report applies (i.e. the month prior to the previous consumption period)
Allocation Participant	Char (4)	М	Valid code for participant
Gas Gate	Char (8)	М	Gas gate code as determined by Gas Industry Co
Network Code	Char (4)	М	Valid network code at the gas gate
Actual Sales (GJ)	Num (10.3)	М	Sum of the actual sales billed for the relevant 12 months for the retailer and gas gate, in GJ, from GAS070
Consumption (GJ)	Num (10.3)	Μ	Sum of the latest consumption information provided by the retailer to the allocation agent for the 12 consumption periods commencing one month earlier than the first month billed, for the retailer and gas gate, in GJ. (See GAS040, GAS050 and GAS060)

Difference Between Sales and Submitted Consumption Data	Num (10.3)	М	Actual Sales (GJ) minus Consumption (GJ), in GJ. See above.
Sales/Submission (%)	Num (3.2) (percentage)	Μ	Actual Sales divided by Consumption (see above), expressed in percentage terms (and rounded).

Example (Annual	HDR,GAR080,ALLA,APAR,GASW,19/11/2008,12:32:02,2
reconciliation):	DET,09/2008,RETA,HST05210,NETA,24595.726,24695.264,-99.538,99.6

Sub-process:	GAR090 Report annual UFG factors & G1M gas gates
Process:	Generate annual reports
Destination:	Public website
Rule references:	25C.5, 46.4.2, 46A
Dependencies:	GAP040, GAP060

For each gas year the allocation agent must publish, by the 1st business day in July of the previous gas year:

- the AUFG factor determined for each allocated gas gate (see GAP030) for that gas year; and
- the G1M gas gates determined in accordance with the G1M criteria (see GAP035) for that gas year.

Business requirements:

- The allocation agent must publish, by the 1st business day in July of each year, the annual UFG factors and G1M gas gates which will apply to the next gas year (commencing 1st October).
- This report must show the AUFG factor and G1M gas gate determination for each allocated gas gate for the new gas year commencing 1st October and any indicators showing that the AUFG factor was corrected or determined by Gas Industry Co.
- 3. The report must also show the TOU load proportion for each allocated gas gate and the MUFG volatility count at each allocated gas gate.
- 4. Information must be published for every allocated gas gate.
- 5. The allocation agent must republish the report, if directed to do so by Gas Industry Co, in order to correct an erroneous AUFG factor at one or more gas gates.
- 6. The AUFG and G1M gas gate determinations for a new or altered gas gate is to be determined by Gas Industry Co.

Data inputs:

Gas year being processed.

AUFG factor and any indicator for each allocated gas gate for the new gas year (output in GAP030).

G1M gas gate determination indicator (Y/N), TOU load proportion and MUFG volatility count for each allocated gas gate for the new gas year (output in GAP035)

Processing:

The allocation agent:

• formats the report as shown in the section below.
Outputs:

AUFG factors & G1M gas gates report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR090″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	Μ	"APAR"
Recipient	Char (4)	М	″GASW″
Report Run Date	DD/MM/YYYY	М	Date the report is created
Report Run Time	HH:MM:SS	М	Time the report is created
Number of Records	Num (6)	М	Total number of detail records in report.

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Gas Year Start Date	DD/MM/YYYY	М	01/10/YYYY where YYYY is the relevant year
Gas Year End Date	DD/MM/YYYY	Μ	30/09/YYYY where YYYY is the relevant year
Gas Gate	Char (8)	Μ	Gas gate code as determined by Gas Industry Co
Network Code	Char (4)	М	Valid network code at the gas gate
Annual UFG Factor	Num (5.4)	М	Annual UFG Factor calculated in GAP030
Assessment Indicator	Char(1)	0	"Y" for Yes if factor was assessed by Gas Industry Co pursuant to rule 47, "C" for Corrected if factor was corrected pursuant to rule 46A ¹⁴ , or blank
G1M Gas Gate Indicator	Char(1)	Μ	"Y" for Yes if the gas gate will be a G1M gas gate in the relevant gas year, "N" for No otherwise
TOU Load Proportion	Num (5.4)	Μ	TOU load proportion calculated in GAP035
MUFG Volatility Indicator	Num (2)	М	Count of MUFG factors outside MUFG volatility threshold, calculated in GAP035 ¹⁵

¹⁴ The code will mark any changed AUFG factor with a 'C', based on a comparison with the last published run. ¹⁵ For gas gates covered by the G1M exemption, the MUFG volatility will be manually assessed. The correct value may not be reflected in the GAR090. Refer to footnote in GAP035

Example AUFG factors &	HDR,GAR090,ALLA,APAR,GASW,01/07/2008,12:32:02,3
G1M gas gates):	DET,01/10/2008,30/09/2009,TWA35610,NETA,1.0210,,N,0.2105,1
Ciri guo gutto).	DET,01/10/2008,30/09/2009,HST05210,NETA,1.0080,Y,N,0.7617,0
	DET,01/10/2008,30/09/2009,CAM17201,NETA,1.0038,,Y,0.8742,10

Sub-process:	GAR100 Report meter reading frequency compliance
Process:	Generate industry body reports
Destination:	Gas Industry Co
Rule references:	Related to 40.2
Dependencies:	GAS080

The allocation agent produces a meter reading frequency compliance report for Gas Industry Co by the end of each month which analyses information provided by retailers for the previous 12 consumption periods.

Business requirements:

1. The allocation agent must deliver to Gas Industry Co a meter reading frequency report by the last business day of the consumption period.

Data inputs:

Meter Reading Frequency reports for the past 12 consumption periods received via GAS080.

Processing:

The allocation agent:

- extracts the rolling 4 month validated register reading percentage and the 12 month validated register reading percentage input by each allocation participant via GAS080 for each of the 12 previous consumption periods.
- assigns an asterisk to the percentage if the percentage value is less than the appropriate threshold. The threshold for the 4 month percentage is 90%. The threshold for the 12 month percentage is 100%.
- formats the report as shown in the section below with an extra line under the Header with column headings to enable printing of the report using a spreadsheet.

Outputs:

Meter Reading Frequency Compliance report, sorted by allocation participant and rolling month:

Exceptions:

If values are missing for any month, zeroes will be shown without an asterisk – assumption being that the retailer did not trade in that month and any missing submissions will have been picked up and reported in GAS080.

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR100″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run.
Report Run Time	HH:MM:SS	М	Time the report is run.
Number of Records	Num (6)	М	Total number of detail records in report.

Next row after the Header to show the column headings for example: Record Type,Retailer,Rolling Month,October 2008,November 2008,December 2008,January 2009,February 2009,March 2009,April 2009,May 2009,June 2009,July 2009, August 2009,September 2009.

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Allocation Participant	Char (4)	М	Directly from data input in GAS080.
Rolling month	Char 8		"4 Month" or "12 Month"
Month - Consumption Period minus 11	Num(3.2)*	М	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 11 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 10	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 10 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 9	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 9 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 8	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 8 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 7	Num(3.2)*	М	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 7 th month, with asterisk if value less than relevant 4 month or 12 month threshold

Month - Consumption Period minus 6	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 6 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 5	Num(3.2)*	Σ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 5 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 4	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 4 th month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 3	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 3 rd month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 2	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous 2 nd month, with asterisk if value less than relevant 4 month or 12 month threshold
Month - Consumption Period minus 1	Num(3.2)*	Σ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the previous month, with asterisk if value less than relevant 4 month or 12 month threshold
Month – Current Consumption Period	Num(3.2)*	Μ	Relevant 4 or 12 month validated register reading percentage from data input in GAS080 for the current month, with asterisk if value less than relevant 4 month or 12 month threshold

F	HDD CAD100 ALLA ADAD CICY 28/11/2008 12:22:02 4
Example	DDR,GARIOU,ALLA,APAR,GICX,20/11/2006,12:52:02,4
(Motor	Record Type, Retailer, Rolling Month, November 2007, December 2007, January 2008, February
(Meter	2008 March 2008 April 2008 May 2008 June 2008 July 2008 August 2008 September 2008
Read	
_	OCLODEF 2008
Frequency	DET,RETA,4 Month,86.3*,85.6*,87.8*,88.6*,90.02,91.56,89.99*,86.1*,91.8,91.3,98.5,89.6*
Data):	DET,RETA,12 Month,96.3*,95.6*,97.8*,98.6*,99.02*,91.56*,99.99*,96.1*,91.8*,91.3*,100,100
,	DET,RETB,4 Month,86.3*,85.6*,87.8*,88.6*,90.02,91.56,89.99*,86.1*,91.8,91.3,98.5,89.6*
	DET,RETB,12 Month,96.3*,95.6*,97.8*,98.6*,99.02*,91.56*,99.99*,96.1*,91.8*,91.3*,100,100

Sub-process:	GAR110 Report percentage of historical estimates
Process:	Generate industry body reports
Destination:	Gas Industry Co
Rule references:	Related to 40.1
Dependencies:	GAS040, GAS050, GAS060

A report is required by Gas Industry Co to show the proportion of historical estimates in the initial submissions and subsequent revisions.

Business requirements:

- 1. The allocation agent must deliver the analysis to Gas Industry Co by the first business day of the month, after the submissions have been processed and only for consumption periods that have had initial, interim or final (or special) allocation runs published in the previous reconciliation month. (N.B. This report is currently published for each allocation on the dates and times specified in GAR060 i.e. in advance of the required timeframe).
- 2. The allocation agent must generate separate reports for each consumption period.
- 3. Where the allocation agent has estimated consumption, the quantity of historical estimates will be zero.

Data inputs:

Submission information for all allocation groups except 1 and 2 (GAS040, GAS050 and GAS060).

Processing:

The allocation agent:

- extracts all consumption information, i.e. that which was used in each allocation stage, for each consumption period processed (in the previous month) with allocation stages of initial, interim or final (or special), ignoring allocation groups 1 and 2;
- aggregates the submitted consumption by consumption period, allocation stage, gas gate and retailer;
- formats the report as shown below.

Outputs:

Proportion of historical estimates report:

Description	Туре	M/O	Validation
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Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR110″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run.
Report Run Time	HH:MM:SS	М	Time the report is run.
Number of Records	Num (6)	М	Total number of detail records in report.

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which the information applies
Allocation Stage	Char (1)	М	 I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Retailer from submissions
Gas Gate	Char (8)	М	Gas gate from submissions
Network Code	Char (4)	М	Valid network code of gas gate
Total monthly submission volume (GJ) in this allocation stage	Num (10.3)	М	Consumption submitted aggregated by consumption period, allocation stage, retailer and gas gate.
Total monthly historical estimate (GJ) in this allocation stage	Num (10.3)	М	Quantity of historical estimate submitted aggregated by consumption period, allocation stage, retailer and gas gate.
Percentage of historical estimate in this allocation stage	Num (4.2)	М	Calculated from values above.
Percentage variation of this revision's submission volume against the volume in the initial allocation stage	Num (4.2)	М	Calculated. Percentage increase or decrease. Zero for initial allocation stage.
Percentage variation of this revision's historical estimate volume against the historical estimate volume in the initial allocation stage	Num (4.2)	M	Calculated. Percentage increase or decrease. Zero for initial allocation stage.

Example (Proportion	HDR,GAR110,ALLA,APAR,GICX,06/11/2009,12:32:02,2
of historical	DET,10/2008,I, RETA,TWA35610,NETA,5,1000.000,600.000,60.00,0,0 DET 10/2008 M RETA TWA35610 NETA 5 900 000 450 000 50 00 -10 0 -25 0
estimates):	DE1,10/2000,11, REIA,1WA33010,WEIA,3,900.000,430.000,30.00, 10.0, 23.0

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Sub-process:	GAR120 Report incidents
Process:	Generate industry body reports
Destination:	Gas Industry Co
Rule references:	None
Dependencies:	

The allocation agent reports rule breach incidents to Gas Industry Co.

Business requirements:

- 1. The allocation agent must provide a report in respect of any alleged breach of the Rules and, to the extent possible, within 5 business days of becoming aware of the alleged breach.
- 2. The allocation agent must provide a report in respect of any breach by the allocation agent of its obligations under the Rules within 2 business days of the service provider becoming aware of that breach.
- 3. The allocation agent must agree with Gas Industry Co on the mechanism used to forward the report.

Data inputs:

Occurrences of rule breaches: type of rule breach, dates, times, participant and details.

Processing:

The allocation agent:

• collects incidents and reports to Gas Industry Co using the agreed mechanism.

Outputs:

Incident report.

Sub-process:	GAR130 Report allocation information to TSOs
Process:	Generate TSO allocation information
Destination:	Transmission System Owners
Rule references:	None
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

Each month the allocation agent provides TSOs with initial, interim and final allocation information for the purpose of upstream balancing and invoicing.

Business requirements:

- 1. The allocation agent must generate allocation information for TSOs, which includes contract IDs.
- 2. The allocation agent must agree a mechanism with TSOs for the transfer of this information in an efficient manner.
- 3. The OATIS file format (see below) must be used as the default format for all TSOs.
- 4. The allocation agent must generate one file per allocated gas gate.
- 5. For OATIS-based transmission systems, the allocation agent must have reached agreement with the relevant TSO on the terms of use and have been allocated login details.

Data inputs:

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 output from GAP040, GAP060, GAP080, and GAP100.

Consumption period being processed.

Allocation stage being processed.

TSO translation tables – gas gates and allocation participants.

Processing:

The allocation agent:

- aggregates the allocation quantities by Welded Point ID, Shipper ID, Contract ID and Day and outputs it in the OATIS file format. Welded Point ID and the Shipper ID are obtained from the translation tables using the gas gate and allocation participant from the allocation information as keys;
- one file for each Welded Point;
- finds the TSO of each Welded Point ID and produces one zip file for each TSO, containing the appropriate files;
- uploads into OATIS the zip file(s) for the TSO(s) provided for on OATIS;
- delivers the other files to the appropriate TSOs.

N.B. OATIS accepts multiple uploads of single or multiple files. Only the latest information is used by OATIS.

Also, note that initial allocation files may be uploaded to OATIS following the initial allocation, with First Gas' permission. Interim and final allocation files will be uploaded to OATIS at the completion of BPP billing the following month, as advised by First Gas. OATIS does not require a specific file naming convention.

Outputs:

Each output file is a report with titles, sub-headings, data rows and a row of totals. Each file contains information for one Welded Point ID.

Each file is in .CSV format.

Currently the mechanism for delivering this information to First Gas is via publication to the gas portal.

The following format is for each individual file which is for one Welded Point ID.

Exceptions:

If OATIS or other TSOs' systems reject a file due to validation errors, the allocation agent must correct and reload the information. Any issues should be raised with the appropriate TSO for resolution.

Description	Туре	Validation	
Header - Row 1		Must be "Welded Point ID,Date,Shipper ID,Contract ID,Delivered Energy".	
Detail rows from sec	ond row onwards:		
Welded Point ID	Char(8)	Welded Point ID from the gas gate translation table. There can only be one such code in each file.	
Date	dd/mm/yyyy	Valid date. There must be no missing days in the consumption period for each retailer and Contract ID unless the contract commenced or ceased trading during the month when there could be missing days.	
Shipper ID	Char(4)	Shipper ID from the allocation participant translation table. Each file contains all shippers with allocation information at this Welded Point ID.	
Contract ID	Char(4)	Valid Contract ID for retailer for Date. It is possible for a retailer to have more than one Contract ID at a gas gate.	
Delivered Energy	Num(10.3)	Aggregated allocated quantities. A positive or negative number with leading and trailing zeroes omitted.	
One final trailing totals row:			
	Total,,,, <num(10.3)></num(10.3)>	Must be "Total,,,," followed by a number that is the total of all the Delivered Energy values in the file.	
		Blank row after totals row	

Welded Point ID,Date,Shipper ID,Contract ID,Delivered Energy BEL24510,1/12/2007,RETA,1109,1566.114 BEL24510,2/12/2007,RETA,1109,940.898 BEL24510,3/12/2007,RETA,1109,3237.515

BEL24510,31/12/2007,RETA,1109,677.335 BEL24510,1/12/2007,RETA,1209,4116.651 BEL24510,2/12/2007,RETA,1209,898.940 BEL24510,3/12/2007,RETA,1209,515.237

BEL24510,31/12/2007,RETA,1209,533.776 BEL24510,1/12/2007,RETB,1120,671.192 BEL24510,2/12/2007,RETB,1120,403.242 BEL24510,3/12/2007,RETB,1120,1387.506

BEL24510,31/12/2007,RETB,1120,290.286 Total,,,,92868.183

Sub-process:	GAR130a Allocation information for TSOs
Process:	Generate reports
Destination:	Transmission System Owners and the GIC
Rule references:	None
Dependencies:	GAU040, GAU060, GAU080, GAU100

Each month the allocation agent provides TSOs with initial, interim and final allocation information for the purpose of upstream balancing and invoicing.

Business requirements:

- 1. The allocation agent must generate allocation information for TSOs, which includes contract IDs.
- 2. The allocation agent must agree a mechanism with TSOs for the transfer of this information in an efficient manner.
- 3. The OATIS file format (see below) must be used as the default format for all TSOs.
- 4. The allocation agent must generate one file for all welded points.
- 5. For OATIS-based transmission systems, the allocation agent must have reached agreement with the relevant TSO on the terms of use and have been allocated login details.

Processing:

The allocation agent:

- aggregates the allocation quantities by Welded Point ID, Shipper ID, Contract ID and Day and outputs it in the OATIS file format. Welded Point ID and the Shipper ID are obtained from the translation tables using the gas gate and allocation participant from the allocation information as keys;
- finds the TSO of each Welded Point ID and produces one file for each TSO, containing the appropriate welded points;
- delivers the file/s to the appropriate TSO's.

Outputs:

The output file is a report with titles, sub-headings, data rows and a row of totals.

The file contains information for all applicable Welded Point ID for each TSO.

The file is in .CSV format.

The file is sorted Alphabetically by Welded Point and by Shipper ID and by date.

Exceptions:

If OATIS or other TSOs' systems reject a file due to validation errors, the allocation agent must correct and reload the information. Any issues should be raised with the appropriate TSO for resolution.

Description	Туре	Validation	
Header - Row 1		Must be "Welded Point ID,Date,Shipper ID,Contract ID,Delivered Energy".	
Detail rows from sec	cond row onwards:		
Welded Point ID	Char(8)	Welded Point ID from the gas gate translation table. There can only be one such code in each file.	
Date	dd/mm/yyyy	Valid date. There must be no missing days in the consumption period for each retailer and Contract ID unless the contract commenced or ceased trading during the month when there could be missing days.	
Shipper ID	Char(4)	Shipper ID from the allocation participant translation table. Each file contains all shippers with allocation information at each Welded Point ID.	
Contract ID	Char(4)	Valid Contract ID for retailer for Date. It is possible for a retailer to have more than one Contract ID at a gas gate.	
Delivered Energy	Num(10.3)	Aggregated allocated quantities. A positive or negative number with leading and trailing zeroes omitted.	
One final trailing totals row:			
	Total,,,, <num(10.3)></num(10.3)>	Must be "Total,,,," followed by a number that is the total of all the Delivered Energy values in the file.	
		Blank row after totals row	

Sub-process:	GAR140 Provide gas gate information
Process:	Generate on demand reports
Destination:	Gas Industry Co, Allocation participants
Rule references:	None
Dependencies:	GAS010

The allocation agent maintains the gas gate reference information and provides allocation participants and Gas Industry Co with the latest information every time the information is updated.

Business requirements:

- 1. The information must be made available to Gas Industry Co and allocation participants to view and download from the gas allocation portal.
- 2. The report must contain the latest information each time it is requested from the gas allocation portal.

Data inputs:

Gas gate information.

Gas Industry Co determinations of:

- Direct connect gas gates
- Unmetered and oversized metered gas gates

Processing:

The allocation agent:

• Maintains, validates, stores and displays the information with a date and time stamp;

Outputs:

Updated gas gate reference information.

Description	Туре	M/O	Validation
Gas Gate Code	Char (8)	М	Unique code.
Gas Gate Name	Char (32)	М	Location details.
Gas Gate Type	Char (2)	М	GN – gas gate connected network, EN – embedded gas network, GD – direct connect, UN – unmetered gas gate OS – oversized metered gas gates

			ND – notional delivery point.
Network Code	Char (4)	М	Valid network code at the gas gate. For gas gates of type GD this will be the allocation code of the consumer.
Responsible TSO	Char (4)	М	TSO of the gas gate.
Parent Gas Gate Code	Char (8)	M/O	Required if gas gate type is EN.
Notional Delivery Point Code	Char (8)	0	Gas gate code at which allocations are determined and published
Notice Date	DD/MM/YYYY	М	Date when notice was given that this gas gate was to commence.
Start Date	DD/MM/YYYY	М	Date the information in this record became applicable.
End Date	DD/MM/YYYY	М	Date the information in this record ceased/ceases to be applicable.
Audit Input Date/Time	DD/MM/YYYY HH:MM:SS	М	
Input By (User Name)	Char (8)	М	
Audit Deletion Date/Time	DD/MM/YYYY HH:MM:SS	0	
Deleted By (User Name)	Char (8)	0	

Sub-process:	GAR150 Report gas gates with changed allocations
Process:	Generate TSO allocation information
Destination:	Transmission System Owners and Retailers
Rule references:	None
Dependencies:	GAP050 GAP070 GAP090 GAP100 GAP120

A report is required by TSOs after each allocation following the initial allocation, which identifies those gas gates with allocation quantities that have changed or are new since the last allocation.¹⁶

Business requirements:

- 1. The allocation agent must produce this allocation changes report for each allocation following the initial allocation (i.e. the report is generated immediately after amended initial allocations; immediately after interim and amended interim allocations; immediately after final and amended final allocations; and immediately after special allocations).
- 2. The report is to identify those allocated gas gates with allocation quantities that have changed since the last allocation (e.g. amended initial allocation is compared against initial allocation or against special allocation, whichever is the later; final allocation is compared against interim allocation or against amended interim allocation or against special allocation, whichever is the later).

Data inputs:

Consumption period and allocation stage.

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 for the current consumption period and current allocation stage (output from GAP040, GAP060, GAP080 and GAP100).

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 for the current consumption period and the immediately prior published allocation stage (output from GAP040, GAP060, GAP080 and GAP100).

Injection information from TSOs for the appropriate consumption period (GAS030).

Processing:

The allocation agent:

- compares the daily allocated quantities for a given (current) published allocation run with the daily allocated quantities for a (the) previous published allocation run;
- formats the report as shown below.

¹⁶ Note that this GAR150 report was developed by the allocation agent at the request of Vector, Contact Energy, Genesis Energy and Mighty River Power. Those parties agreed that this report is to be generated for, and provided to, all transmission system owners and retailers. Accordingly, this GAR150 report is included as part of the functional specification of the allocation system.

Outputs:

Allocation changes report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR150″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	Valid code of relevant participant
Report Run Date	DD/MM/YYYY	М	"Initial", "Interim", "Final", "Special"
Report Run Time	HH:MM:SS	М	"Initial", "Interim", "Final", "Special"
Number of Records	Num (6)	М	Date the report is run

Description	Туре	M/O	Validation
Consumption Period	DD/MM/YYYY	Μ	Calendar month to which the information applies
Gas Gate	Char (8)	М	Gas gate with revised allocation quantities
Injection Quantity Changed?	Char (2 / 3)	Μ	"Yes" if total monthly injection quantity has changed and "No" if total monthly injection quantity unchanged
Previous Injection Quantity (GJ)	Num (10.3)	Μ	Injection quantity provided by TSO for previous allocation run
Current Injection Quantity (GJ)	Num (10.3)	М	Injection quantity provided by TSO for current allocation run

Example (Allocation changes):	HDR,GAR150,ALLA,APAR,GICX,Initial,Initial,13/11/2008,11:32:02,3 DET,07/2008,EGC30701,Yes,756.123,756.456 DET,07/2008,GMM08001,Yes,230.000,267.246
	DET,07/2008,KAP12901,No

Sub-process:	GAR160 Report summary allocated quantities
Process:	Generate industry body reports
Destination:	Gas Industry Co
Rule references:	Related to 16 & 17
Dependencies:	GAR070

A report is required by Gas Industry Co to show the total allocated quantities per retailer across all allocated gas gates in each interim allocation.

Business requirements:

- 1. The allocation agent must produce this summary allocated quantities report for each interim allocation by 0800 hours on the 11th business day of each month.
- 2. For each consumption period being processed, the report must show the total allocated quantities per retailer across all allocated gas gates at the interim allocation.
- 3. If a special allocation is directed that replaces an interim allocation, the report must be republished.

Data inputs:

Allocated quantities per retailer per allocated gas gate (GAR070).

Processing:

The allocation agent:

- extracts the allocated quantities information and aggregates it by retailer;
- formats the report as shown below.

Outputs:

Allocated quantities summary report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR160″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants

Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	ΜΜ/ΥΥΥΥ	М	Calendar month to which the information applies
Allocation Stage	Char (1)	М	M – Interim Allocation
Allocation Participant	Char (4)	М	Retailer code of the allocated quantity being aggregated
Total Quantity (GJ) in this allocation stage	Num (10.3)	М	Aggregated allocation quantity

Example (Summary allocation results):	HDR,GAR160,ALLA,APAR,GICX,06/11/2009,12:32:02,3 DET,10/2008,M,RETA,756.123 DET,10/2008,M,RETB,230.000 DET,10/2008,M,RETC,83.556

Sub-process:	GAR170 Report summary submissions
Process:	Generate industry body reports
Destination:	Gas Industry Co
Rule references:	None
Dependencies:	GAS030, GAS040, GAS050, GAS060

A report is required by Gas Industry Co to show the total injection and consumption quantities submitted (or estimated) per gas gate.

Business requirements:

- 1. The allocation agent must publish this summary report for each allocation performed during the month, by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. The allocation agent must produce this summary report automatically for each special allocation performed.
- 3. For each consumption period and allocation stage being processed, the report must show the total injection quantity submitted or estimated by the allocation agent for all allocated gas gates. If any of the quantities contain estimates then the quantity must be indicated as such.
- 4. For each consumption period and allocation stage being processed, where (pursuant to rule 41.4) a TSO has made injection quantities available to the allocation agent for direct connect gas gates, the report must show the total injection quantity for each direct connect gas gate.
- 5. For each consumption period and allocation stage being processed, the report must show the total consumption quantities submitted or estimated by the allocation agent per allocated gas gate, retailer and allocation group and also the total consumption quantities submitted or estimated by the allocation agent aggregated per allocated gas gate and retailer. If any of the quantities contain estimates then the quantity must be indicated as such.
- 6. The gas gates should be aggregated to the notional delivery point level (i.e. be at the same level as the GAR070 report).

Data inputs:

Injection submission information from TSOs (GAS030). Consumption information for all allocation groups (GAS040, GAS050 and GAS060).

Processing:

The allocation agent:

- extracts the injection submission information and aggregates the total delivered energy by consumption period, allocation stage, gas gate and TSO;
- extracts the consumption information and aggregates the consumption quantity by consumption period, allocation stage, gas gate, retailer and allocation group;
- aggregates any gas gates involved in notional delivery points at the notional delivery point level for both injection and consumption;
- formats the report as shown below.

Outputs:

Submissions summary report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR170″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which the information applies
Allocation Stage	Char (1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Network Code	Char (4)	М	Valid network code of gas gate
Gas Gate	Char (8)	М	Allocation gas gate
Allocation Participant	Char (4)	М	Relevant retailer for consumption submissions, or relevant TSO for injection information
Aggregation Level	Char (12)	М	For injection submissions "Injection" otherwise for consumption aggregated to the allocation group level "AllocGroup" <allocation group=""> otherwise "Retailer"</allocation>

Total Quantity (GJ) in this allocation stage	Num (10.3)	Μ	Aggregated consumption or injection quantity at the relevant aggregation level
Estimate Indicator	Char (1)	0	"E" if estimated data in GAS050 submission file and/or allocation agent has estimated data in lieu of missing data from retailer or TSO, else blank

Example (Submissions	HDR,GAR170,ALLA,APAR,GICX,06/11/2009,12:32:02,6
summary)	DET,10/2008,I,NETA,WVY23601,VCTX,Injection,1650.900,E
summary).	DET,10/2008,I,NETA,WVY23601,RETA,AllocGroup 1,756.123,E
	DET,10/2008,I,NETA,WVY23601,RETA,AllocGroup 4,230.000
	DET,10/2008,I,NETA,WVY23601,RETA,Retailer,986.123,E
	DET.10/2008.1.NETA.WVY23601.RETB.AllocGroup 4.83.556
	DET.10/2008 J.NETA.WVY23601.RETB.Retailer.83.556

Sub-process:	GAR170b Report summary submissions to TSOs
Process:	Generate industry body reports
Destination:	TSOs (with agreement of retailers)
Rule references:	None
Dependencies:	GAS030, GAS040, GAS050, GAS060

A report for the TSOs to show the total non-TOU consumption quantities submitted (or estimated) per gas gate.

Business requirements:

- 1. The allocation agent must publish this summary report for each allocation performed during the month, by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. The allocation agent must produce this summary report automatically for each special allocation performed.
- 3. The report must only be available to TSOs upon agreement of retailers.
- 4. For each consumption period and allocation stage being processed, the report must show the total non-TOU consumption quantities submitted or estimated to the allocation agent per allocated gas gate, retailer and allocation group. If any of the quantities contain estimates then the quantity must be indicated as such.
- 5. The gas gates should be aggregated to the notional delivery point level (i.e. be at the same level as the GAR070 report).

Data inputs:

Consumption information for non-TOU allocation groups (GAS040)

Processing:

The allocation agent:

- extracts the consumption information and aggregates the consumption quantity by consumption period, allocation stage, gas gate, retailer and non-TOU allocation group;
- aggregates any gas gates involved in notional delivery points at the notional delivery point level for consumption;
- formats the report as shown below.

Outputs:

Submissions summary report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR170″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"VCTX" – First Gas
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	MM/YYYY	М	Calendar month to which the information applies
Allocation Stage	Char (1)	М	 I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Network Code	Char (4)	М	Valid network code of gas gate
Gas Gate	Char (8)	М	Allocation gas gate
Allocation Participant	Char (4)	М	Relevant retailer for consumption submissions
Aggregation Level	Char (12)	М	Consumption aggregated to the allocation group level "AllocGroup" <allocation group=""></allocation>
Total Quantity (GJ) in this allocation stage	Num (10.3)	М	Aggregated consumption or injection quantity at the relevant aggregation level
Estimate Indicator	Char (1)	0	"E" if allocation agent has estimated data in lieu of missing data from retailer else blank

Example (Submissions	HDR,GAR170,ALLA,APAR,VCTX,22/07/2019,14:32:46,6
summary)	DET,06/2018,F,NETA,ASH34301,RETA,AllocGroup 6,121.237,
Summary).	DET,06/2018,F,NETA,BEL24510,RETA,AllocGroup 4,3490.009,
	DET,06/2018,F,NETA,BEL24510,RETA,AllocGroup 6,11596.02,
	DET,06/2018,F,NETA,BEL24510,RETB,AllocGroup 6,10122.95,
	DET,06/2018,F,NETB,CAM17201,RETA,AllocGroup 4,409.679,
	DET,06/2018,F,NETB,CAM17201,RETAAllocGroup 6,1921.951,

Sub-process:	GAR180 Report daily allocation information to industry body
Process:	Generate monthly allocation & reconciliation reports
Destination:	Gas Industry Co
Rule references:	None
Dependencies:	GAS020, GAR010

For each allocation, the allocation agent provides the industry body with daily allocation information aggregated at a retailer, gas gate, allocation group and contract ID level.

Business requirements:

- 1. The allocation agent must publish the report for each allocation performed during the month by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. The report must only be available to Gas Industry Co.
- 3. This report must show, for all allocated gas gates and all retailers:
 - the daily injection quantity;
 - allocated quantities, by allocation group; and monthly UFG factor
- 4. The report must show the same contract IDs that are reported in the GAR130, based on the trading information supplied by retailers and TSOs via the GAS020 process, not the contract IDs that may or may not be included in the GAS050 submission

Data inputs:

Allocated quantities for allocation groups 1, 2, 3, 4, 5 and 6 output from GAP040, GAP060, GAP080, and GAP100.

Consumption period being processed.

Allocation stage being processed.

Contract ID tables

Processing/outputs:

The allocation agent formats the report according to the details given in the file format section below.

Submissions summary report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR180″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	YYYYMM	М	Consumption period
Allocation Stage	Char (1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	Μ	Retailer code of the allocated quantity being aggregated.
Gas Gate	Char (8)	М	Allocation gas gate
Network Code	Char(4)	М	Valid network code at the gas gate.
Gas Gate Injected Quantity for Consumption Day	Num (10.3)	М	Injected quantity at gas gate in GJ for the gas gate, consumption day and allocation stage
Gas Gate Annual UFG Factor	Num (5.4)	М	Annual UFG factor used for allocation groups 1 and 2 for the gas gate, consumption period and allocation stage
Gas Gate Monthly UFG Factor	Num (5.6)	Μ	Monthly UFG factor used for allocation groups 3 to 6 for the gas gate, consumption period and allocation stage
Allocation Group	Num (1)	М	Allocation group (3 to 6)
Contract ID	Char (8)	М	Contract ID for gas transmission contract.
Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the allocation has been made
Allocation for Consumption Day (GJ)	Num (10.3)	М	

Sub-process:	GAR180b Report daily allocation information to TSOs
Process:	Generate monthly allocation & reconciliation reports
Destination:	TSOs (with agreement of retailers)
Rule references:	None
Dependencies:	GAS020, GAR010

For each allocation, the allocation agent provides TSOs with daily non-TOU allocation information aggregated at a retailer, gas gate, allocation group and contract ID level.

Business requirements:

- 1. The allocation agent must publish the report for each allocation performed during the month by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. The report must only be available to TSOs upon agreement of retailers.
- 3. This report must show, for all allocated gas gates and all retailers who opt in:
- allocated quantities, by non –TOU allocation groups; and monthly UFG factor
 The report must show the same contract IDs that are reported in the GAR130, based
- on the trading information supplied by retailers and TSOs via the GAS020 process, not the contract IDs that may or may not be included in the GAS050 submission

Data inputs:

Allocated quantities for allocation groups 3, 4, 5 and 6 output from GAP040, GAP060, GAP080, and GAP100.

Consumption period being processed.

Allocation stage being processed.

Contract ID tables

Processing/outputs:

The allocation agent formats the report according to the details given in the file format section below.

Submissions summary report:

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"

File Type	Char (6)	М	"GAR180″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"VCTX" – TSO
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	YYYYMM	М	Consumption period
Allocation Stage	Char (1)	М	I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Retailer code of the allocated quantity being aggregated.
Gas Gate	Char (8)	М	Allocation gas gate
Network Code	Char(4)	М	Valid network code at the gas gate
Gas Gate Injected Quantity for Consumption Day	Num (10.3)	М	Injected quantity at gas gate in GJ for the gas gate, consumption day and allocation stage
Gas Gate Annual UFG Factor	Num (5.4)	М	Annual UFG factor used for allocation groups 1 and 2 for the gas gate, consumption period and allocation stage
Gas Gate Monthly UFG Factor	Num (5.6)	М	Monthly UFG factor used for allocation groups 3 to 6 for the gas gate, consumption period and allocation stage
Allocation Group	Num (1)	М	Allocation group (1 to 6)
Contract ID	Char (8)	М	Contract ID for gas transmission contract.
Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the allocation has been made
Allocation for Consumption Day (GJ)	Num (10.3)	М	

Example	HDR,GAR180,ALLA,APAR,VCTX,22/07/2019,14:32:46,6
(non-TOU	DET,201806,F,RETA,ASH34301,NETA,31.558,0.8124,1.023458,6,1117,01/06/2018,9.703
	DET,201806,F,RETA,BEL24510,NETA,5829.439,1.0217,1.03385,4,1117,01/06/2018,107.896
allocations	DET,201806,F,RETA,BEL24510,NETA,5829.439,1.0217,1.03385,6,1117,01/06/2018,401.919
summary):	DET,201806,F,RETB,BEL24510,NETA,5829.439,1.0217,1.03385,6,1157,01/06/2018,999.213
	DET,201806,F,RETA,CAM17201,NETB,523.604,1.002,1.013948,4,1117,01/06/2018,26.495
	DET,201806,F,RETA,CAM17201,NETB,523.604,1.002,1.013948,6,1117,01/06/2018,36.203

Sub-process:	GAR190 Report daily submission information to industry body
Process:	Generate monthly allocation & reconciliation reports
Destination:	Gas Industry Co
Rule references:	None
Dependencies:	GAS050

For each allocation, the allocation agent provides the industry body with the daily ICP level submissions (GAS050 data) that were used for that allocation, including contract ID and file details. The results are aggregated at a retailer, gas gate, allocation group and contract ID level.

Business requirements:

- 1. The allocation agent must publish the report for each allocation performed during the month by:
 - 1200 hours on the 5th business day of each month for the initial allocation;
 - 0800 hours on the 11th business day of each month for the interim allocation;
 - 0800 hours on the 16th business day of each month for the final allocation; and
 - the time instructed by Gas Industry Co for special allocations
- 2. The report must only be available to Gas Industry Co.
- 3. The report must show all retailers' daily submissions by ICP and day, including the allocation group, the gas gate of the submission (either physical or notional) and the allocated gas gate. The report must only show submissions relative to the allocation being reported on.
- 4. The report must also show the filename of the GAS050 file used for the allocation.
- 5. 5. The report must show the same contract IDs that are reported in the GAR130, based on the trading information supplied by retailers and TSOs via the GAS020 process, not the contract IDs that may or may not be included in the GAS050 submission

Data inputs:

Consumption information from GAS050 submissions

Consumption period being processed.

Allocation stage being processed.

Contract ID tables

Processing/outputs:

The allocation agent formats the report according to the details given in the file format section below.

Description	Туре	M/O	Validation
Header Record Type	Char (3)	М	"HDR"
File Type	Char (6)	М	"GAR180″
Sender	Char (4)	М	"ALLA"
Allocation Participant	Char (4)	М	"APAR" – all participants
Recipient	Char (4)	М	"GICX" – Gas Industry Co
Report Run Date	DD/MM/YYYY	М	Date the report is run
Report Run Time	HH:MM:SS	М	Time the report is run
Number of Records	Num (6)	М	Total number of detail records in report

Description	Туре	M/O	Validation
Detail Record Type	Char (3)	М	"DET"
Consumption Period	YYYYMM	М	Consumption period
Allocation Stage	Char (1)	Μ	 I – Initial Allocation M – Interim Allocation F – Final Allocation S – Special Allocation
Allocation Participant	Char (4)	М	Retailer code of the allocated quantity being aggregated.
Gas Gate	Char (8)	М	Allocation gas gate
Network Code	Char(4)	М	Valid network code at the gas gate.
Gas Gate Injected Quantity for Consumption Day	Num (10.3)	М	Injected quantity at gas gate in GJ for the gas gate, consumption day and allocation stage
Gas Gate Annual UFG Factor	Num (5.4)	М	Annual UFG factor used for allocation groups 1 and 2 for the gas gate, consumption period and allocation stage
Gas Gate Monthly UFG Factor	Num (5.6)	М	Monthly UFG factor used for allocation groups 3 to 6 for the gas gate, consumption period and allocation stage
Allocation Group	Num (1)	М	Allocation group (1 to 6)
Contract ID	Char (8)	М	Contract ID for gas transmission contract.
Consumption Day	DD/MM/YYYY	М	Date of the consumption day for which the allocation has been made
Allocation for Consumption Day (GJ)	Num (10.3)	М	

Sub-process:	GAM010 Maintain reference data
Process:	Maintain data
Source:	Allocation agent
Destination:	Allocation participants
Dependencies:	GAS010 GAS020

The allocation agent maintains the reference data used in the allocation process. Sources of reference data are allocation participants, Gas Industry Co and the Gas Registry.

Business requirements:

- 1. The allocation agent must maintain data and applicable dates for the following:
 - allocation participant code (4 character), full company name, their roles, start and end dates (valid roles are: retailer, distributor, transmission system owner (TSO), meter owner (N/A), Gas Industry Co, allocation agent);
 - gas gate information (see GAR140) with the addition of the metering type unmetered or metered;
 - retailer approved profiles (4 characters) i.e. a list of all profile codes (see GAS020) that can be used by retailers in their submissions;
 - retailer trader information i.e. the gas gates for retailers to use in their submission information;
 - retailer gas transmission contract ID details i.e. contract IDs for the three categories of gas transmission contract – VTC compliant TSA, non-VTC TSAs and supplementary agreement contract IDs, and either a list of their associated gas gates or ICP numbers;
 - allocation group codes numeric 1 to 6.
 - information provided by Gas Industry Co in GAS010;
 - TSO translation tables. TSOs may each have gas gate codes and allocation participant codes that differ to those in the allocation system. Also some allocation participants use multiple codes in the submission process but the TSO only recognises one Shipper ID:

TSO gas gate translation table contains, per TSO:

- TSO allocation participant code char (4)
- Gas gate code char (8)
- Network Code char (4)
- Welded Point ID char (8)
- o Start Date
- $\circ \quad \text{End Date} \quad$

N.B. One Welded Point ID will contain quantities for multiple gas gates in instances where a Welded Point ID corresponds to a notional delivery point ID.

TSO allocation participant table includes:

- TSO allocation participant code char (4)
- Allocation participant code char (4)
- Shipper ID char (4)
- Start Date
- End Date

N.B. One Shipper ID can be associated with more than one allocation participant code.

2. Allocation participants must be able to check the information about them for accuracy.

Data inputs:

Reference information.

Processing:

The allocation agent:

• Inserts or updates reference data in the reference tables as appropriate.

Outputs:

Updated reference tables.

Sub-process:	GAM020 Maintain register of profiles
Process:	Maintain data
Source:	Allocation Agent
Destination:	Allocation participants
Rule references:	54.1

The allocation agent maintains a register of approved static and dynamic deemed profiles. The register and its contents must be accessible by all allocation participants.

Business requirements:

- 1. The allocation agent must record the following information for each approved profile:
 - profile code char (4), used in submissions;
 - profile type char (1), static or dynamic;
 - approval date date the profile was approved by the allocation manager and the date from which it can be used in submissions;
 - submitted date date profile was submitted to the allocation agent for approval;
 - expiry date date from which the profile can no longer be used in submissions and is also the removal date (rule 62);
 - profile owner char (4), valid allocation participant;
- 2. All profile data must be viewable and downloadable by allocation participants.

Data inputs:

New approved profiles and profile amendments.

Processing:

The allocation agent inserts and updates profile register.

Outputs:

Updated profile register.

Download of register contents in .CSV format.