



# Advanced Gas Metering Infrastructure

## Consultation Paper

7 August 2023



Gas Industry Co.



# Executive Summary

This paper sets out Gas Industry Co's approach to potential requirements for a regulatory framework and/or non-regulatory arrangements for a Statement of Proposal (SOP) to support the deployment and use of Advanced Gas Metering Infrastructure (AGMI) across domestic and commercial consumers' gas connections.

In 2017, Gas Industry Co undertook a review into gas metering focusing on metering service provider arrangements and review of advanced metering technology.

In September 2021, Gas Industry Co published its *Advanced Gas Metering – Issues Assessment*<sup>1</sup> paper. The paper set out a preliminary list of potential issues on the deployment of advanced metering technology into the gas market.

In December 2021, Gas Industry Co published *Advanced Gas Metering Submissions Review and Recommendations*<sup>2</sup>, the updated assessment of the priority to be afforded to each of the identified issues, and recommendations on how each of these issues should be progressed.

Gas Industry Co also sets out in this paper the issues that it proposes to maintain a 'watching brief' over – postponing any further work on these issues, pending market developments.

The paper recognises the discussions with stakeholders and submissions on previous papers concerning identified AGMI issues.

In November 2022, Gas Industry Co established the AGMI working group, where stakeholders provided further feedback and generally requested Gas Industry Co to focus only on the following high priority issues:

Initial issue	Section in this paper	Description	Priority
2	2	Minimum data standards and file formats	Type A
3	1	Access to, ownership, use and security of customer data	Type A
17	1	Streamlined process for customer requests for consumption data (EPR C3)	Type A
18	1	Ensure distributors have access to smart meter data on reasonable terms (EPR E3)	Type A
4	3	Potential process and registry changes (including switching procedures)	Type A

<sup>1</sup> <https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering-Infrastructure-Issues-Assessment.pdf>

<sup>2</sup> [https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering\\_Submissions-Review-and-Recommendations\\_16.12.2021.pdf](https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering_Submissions-Review-and-Recommendations_16.12.2021.pdf)

Initial issue	Section in this paper	Description	Priority
5	4	Downstream Reconciliation Rules	Type A
20	4	D+1	Type A

## Submissions

This consultation provides stakeholders with transparency on how Gas Industry Co intends to address the specific AGMI issues.

All issues have been discussed in detail with the industry working group and many have no or little relevance or benefit to significantly support the uptake of gas smart meter deployment and competitive metering market.

Therefore, Gas Industry Co suggests that submitting parties focus on the priority "A" issues. These submissions will help Gas Industry Co to prepare an SOP.

Written submissions on this Consultation Paper should be emailed to Gas Industry Co [consultations@gasindustry.co.nz](mailto:consultations@gasindustry.co.nz) by **5pm on Monday, 4 September 2023**. Please note that submissions received after that time may not be able to be fully considered.

Submissions may be amended at any time prior to the closing date. All submissions will be published automatically on Gas Industry Co's website after the closing date. Submitters should discuss any intended provision of confidential information with Gas Industry Co prior to submitting the information.

Gas Industry Co is happy to meet with any stakeholder who wishes to discuss the position paper in more detail.



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## Purpose

This consultation paper outlines recommendations for progressing solutions to an enduring set of arrangements to enable the deployment and use of gas smart meters. It includes proposals for amendments to the Rules and Regulations but also considers issues which could be solved with a non-regulatory approach to meet the industry's needs. It also highlights the low-priority issues where Gas Industry Co intends to monitor the market development before taking regulatory action or intends to take no further action.

Feedback will inform our forthcoming Statement of Proposal (SOP), which will contain a more detailed assessment of the regulatory and non-regulatory recommendations (including a cost-benefit analysis), as required by the Gas Act 1992, and will invite more substantive submissions from stakeholders. Depending on feedback, the SOP will most likely only address priority "A" issues.

## Background

In 2017, Gas Industry Co undertook a review into gas metering focusing on metering service provider arrangements and review of advanced metering technology.

Submissions highlighted that there was no settled view on the right technical solution, that the market should be allowed to develop without regulatory intervention to ensure that innovation was not hampered; and determining some minimum standards would be a pragmatic step to ensure a common understanding of what market participants want from advanced metering.

Gas Industry Co published its *Advanced Gas Metering – Issues Assessment*<sup>3</sup> paper in September 2021 following initial informal discussions with several gas market stakeholders. The paper set out a preliminary list of potential issues on the deployment of advanced metering technology into the gas market, with our initial commentary on each of the issues, and an initial assessment of the priority to be afforded to each issue.

Gas Industry Co considered submissions and on 17 December 2021, Gas Industry Co published *Advanced Gas Metering Submissions Review and Recommendations*<sup>4</sup>, the updated assessment of the priority to be afforded to each of the identified issues, and recommendations on how each of these issues should be progressed.

In November 2022, Gas Industry Co established the AGMI working group. The AGMI working group is to provide advice on issues related to the deployment of advanced gas metering infrastructure into the New Zealand retail gas market. The AGMI working group's main objective is to support Gas Industry Co to develop potential solutions to address identified issues and to set priorities.

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<sup>3</sup> <https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering-Infrastructure-Issues-Assessment.pdf>

<sup>4</sup> [https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering\\_Submissions-Review-and-Recommendations\\_16.12.2021.pdf](https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/Advanced-Gas-Metering_Submissions-Review-and-Recommendations_16.12.2021.pdf)

Many of the issues initially listed in the *Advanced Gas Metering Infrastructure Issues Assessment* paper reflected participants' experience of the smart meter roll-out in the electricity sector. It quickly became clear that the use-case for gas smart meters is very different and limited compared to electricity smart metering, thus, requiring different solutions, reprioritising, and combining issues.

A description of these issues and Gas Industry Co's recommendations on how these issues should be progressed, is set out in this paper.

However, all initially identified issues, regardless of the priority, are in this consultation paper to provide interested parties a comprehensive picture of the gas smart metering situation.

Gas Industry Co classified the different AGMI issues by using the following categorisation:

Priority Groups	Issue Key
Issues that likely require priority Gas Industry Co consideration. Note, priority may be given to an issue either due to its potential materiality to the outcomes and objectives that Gas Industry Co is expected to pursue under the Government Policy Statement on Gas Governance <sup>5</sup> and the Gas Act and/or due to timing considerations – that is, the nascent state of advanced gas metering in New Zealand enables some shaping of market outcomes now, with change becoming more difficult or costly to achieve over time, as market penetration of AGMI increases.	Type A
Issues that likely allow a 'watching brief' and/or lower priority Gas Industry Co consideration either due to timing considerations or materiality to the outcomes and objectives which Gas Industry Co is expected to pursue under the GPS and the Gas Act.	Type B
Issues that Gas Industry Co does not consider to be relevant to delivering on the outcomes and objectives which Gas Industry Co is expected to pursue under the GPS and the Gas Act.	Type C

The colour coding allocates issues to specific classification groups.

Other	Technology/ systems/ information exchange	Data usage, access, and terms	Downstream Reconciliation and allocation of UFG	GMSA related issues	Costs and benefits to customer
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The collaborative prioritisation process resulted in the below list of priorities and streamlined combination of issues. Due to the combination of relevant issues in this consultation, we could not maintain the initial issue numbering. To make it easier for parties to cross reference with previous papers, we have included the initial issue linked to the relevant section in this consultation paper.

Initial issue	Section in this paper	Description	Initial or revised priority following initial submissions	Priority suggested by GIC and the AGMI working group	Combined with...	Reason for revised priority
1	7	Costs and benefits to consumers	Type B		Issue 8	Consumer outcomes are important but addressed through the competitive gas metering market and ongoing monitoring of potential consumer issues.

<sup>5</sup> <https://www.gasindustry.co.nz/publications/document/4175>

Initial issue	Section in this paper	Description	Initial or revised priority following initial submissions	Priority suggested by GIC and the AGMI working group	Combined with...	Reason for revised priority
2	2	Minimum data standards and file formats	Type A		Issues 11, 12	
3	1	Access to, ownership, use and security of customer data	Type A		Issues 9, 17,18	
4	3	Potential process and registry changes (including switching procedures)	Type A			
5	4	Downstream Reconciliation Rules	Type A		Issue 20	
6	5	Alignment of GMSAs	Type A	Type B	Issue 16	At this point in time, GIC doesn't see that there are efficiency gains through common GMSA terms. This issue can be revisited if issues arise.
7	6	GMSA payment provisions	Type A	Type B		The allocation of costs between retailers and meter owners is a matter for those parties. If issues flow down to consumer contracts this could be considered as part of GIC's role in relation to contractual arrangements with small gas consumers.
8	8	AGMI redundancy risk	Type A	Type B	Issue 1	Reprioritised due to suggested combination with issue 1. Government policy settings in relation to residential connections are unclear at this point. The allocation of costs between retailers and meter owners is a matter for those parties.
9	1	Centralised data provider	Type A	Type B	Issue 3	The key issue is the data access framework and data sharing. Given the small scale of the market a more pragmatic approach might be more economic.
10	9	Advanced meter displacement	Type B			Not an issue at this stage
11	2	Open access AGMI systems	Type A	Type B	Issue 2	At this point, there is no indication that access to third party AGMI systems is a barrier to the uptake of AGMs.

Initial issue	Section in this paper	Description	Initial or revised priority following initial submissions	Priority suggested by GIC and the AGMI working group	Combined with...	Reason for revised priority
12	2	Technology standards	Type A	Type B	Issue 2	GIC acknowledges submitters' concerns that there is a balance between standardisation that enhances efficiency and competition and creating inefficiency by mandating a particular technology. GIC notes that work in relation to other issues will promote an element of standardisation in relation to industry processes.
13	10	GMS ownership and works	Type B	Type C		Gas Industry Co does not see itself as having a role in determining ownership of AGMs or components of metering infrastructure.
14	11	Advanced metering consumer education	Type A	Type C		This is not a priority "A" issue for the AGMI work programme. GIC spoke to GasNZ to take the lead in this area.
15	12	Market competition	Type B	Type C		Gas Industry Co does not consider that it, or the workgroup, can resolve concerns around market concentration referred to under this issue (particularly stakeholder comments around price and quality regulation under Part 4 of the Commerce Act).
16	13	Preferred Supplier Provisions in legacy GMSAs	Type A	Type B	Issue 6	Aligned with Issue 6 priority
17	1	Streamlined process for customer requests for consumption data (EPR C3)	Type A		Issue 3	Aligned with Issue 3 priority
18	1	Ensure distributors have access to smart meter data on reasonable terms (EPR E3)	Type A		Issue 3	Aligned with Issue 3 priority
19	14	Remote disconnections and reconnections	Type A	Type C		Participants are currently not prepared to take the inherent H&S risk of a remote reconnection. Gas Industry Co considers that it doesn't have a role in the H&S aspect but would consider supporting the development of remote disconnection/reconnection guidelines.
20	4	D+1	Type A		Issue 5	Aligned with Issue 5 priority
21	15	Multiple trading relationships	Type C			
22	16	Critical Contingency Regulations.	Type C			

The development of potential solutions for each of these issues must align the advanced gas metering-related outcomes and objectives which Gas Industry Co is expected to pursue under the GPS. Therefore, Gas Industry Co will focus on priority "A" issues only.

Initial issue	Section in this paper	Description	Priority
2	2	Minimum data standards and file formats	Type A
3	1	Access to, ownership, use and security of customer data	Type A
17	1	Streamlined process for customer requests for consumption data (EPR C3)	Type A
18	1	Ensure distributors have access to smart meter data on reasonable terms (EPR E3)	Type A
4	3	Potential process and registry changes (including switching procedures)	Type A
5	4	Downstream Reconciliation Rules	Type A
20	4	D+1	Type A



# 1. Access to, use and security of consumer data

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Gas meters measure the volume of gas consumed at a gas connection and are used for allocation of gas volumes to gas retailers and gas customer billing. The replacement of legacy gas meters with advanced gas meters will change the nature of consumer data that industry participants collect for an individual consumer.

Domestic legacy meters record consumption on a continuous basis and this data is obtained by a physical meter read. In many cases, there are several months between meter reads. In contrast, some advanced gas meters record half-hourly data regarding a customer's gas usage and such data can be obtained by, and delivered to, a retailer remotely.

Concerns around the access to, use and security of customer data are heightened with the introduction of advanced gas meters given the ability of these meters to collect more granular information regarding a customer's gas usage.

The ability of a smart meter to provide accurate consumption data in a timely manner also requires consideration of who may require access to this data and for what purposes.

We have previously considered these issues under four separate headings:

1. Access to, use and security of consumer data
2. Streamlined process for customer requests for consumption data
3. Ensure that distributors have access to smart meter data on reasonable terms
4. Centralised data provider

We have combined the above issues in this section given that they have a common theme of access to advanced meter data. The concept of a "centralised data provider" is more appropriately characterised as a possible solution to concerns around data access, rather than an issue that needed to be considered. However, we provide assessment of this as a possible solution.

## 1.1 Current state of access, use and security of consumer data

### 1.1.1 What is "consumer data"?

For this paper, we consider "consumer data" to mean meter data or information used by a retailer to determine the volume of gas consumed at each of the ICPs where a retailer supplies gas to a consumer.

Consumer data is collected by retailers' gas metering service providers and provided to gas retailers for the purpose of their energy billing processes. These services are provided under gas metering service agreements (GMSAs) that define the service provided by metering service providers.

The collection of consumer data is not limited to consumers who have an advanced gas meter. Retailers also collect consumer data in relation to consumers who are supplied by a legacy meter. However, given the infrequency of meter reads, consumer data from legacy meters is a less valuable source of information regarding a consumer's consumption behaviour.

### **1.1.2 Who may require access to meter data?**

#### **Consumer access**

Consumers may seek to access information that industry participants hold regarding their gas use for the purpose of undertaking price comparison or investigating energy efficiency measures. Consumers have a right to access personal information that retailers hold about their gas use in accordance with the Privacy Act 2020. In some cases, retailers have provided consumers with access to consumption data through online applications, although the level of granularity of this data may be less than the information that the retailer collects.

Consumer rights under the Privacy Act will not extend to consumer data that is not personal information.

#### **Third party access**

Third parties (for example, energy brokers) may wish to access consumer data to provide consumers with advice on alternative pricing options or energy efficiency measures. These third parties are unlikely to have an agreement with retailers that entitles them to access an individual consumer's consumption data and will need to negotiate access to this data on a case-by-case basis. Retailers will need to be satisfied that the consumer has consented to the third-party having access to this data and comply with the requirements of the Privacy Act.

#### **Distributor access**

Gas distributors may also seek access to data associated with a consumer's gas use for pricing and network planning and management purposes. It is unclear whether distributors require access to individual consumer data, or whether aggregated data is sufficient.

Gas distributors may require retailers to provide access to consumer data through their use-of-system agreements. If distributors require such access, the retailer will be responsible for obtaining any authorisations required under the Privacy Act for making the consumption available to the distributor for the specific purposes. This is likely to require a "back-to-back" arrangement in gas retail contracts between the retailer and the consumer whereby consumers agree to the scope of distributor access to consumption data. Both distributors and retailers will be incentivised to ensure that they comply with the requirements of the Privacy Act when negotiating distributor access to meter data.

### **1.1.3 How is consumer data made available?**

There is currently no standard process for consumers, third parties or network owners to access gas consumer data, nor is there any standard form in which this information is made available. Therefore, gas consumer data is made available in accordance with any arrangements that are agreed between the retailer and the requesting party.

We are aware that MBIE is currently consulting on the establishment of a consumer data right in New Zealand. The Consumer and Product Data Bill contemplates a data access regime where certain "accredited requestors" have access to customer data through a direct, secure, and standardised data transfer. Initially this will only apply to the banking sector, but the consultation on the draft bill suggests that a data access regime could be applied to the

energy industry. Detailed aspects of the framework will be specified in regulations and standards that have not been developed yet.

#### **1.1.4 What safeguards are there regarding the security of data?**

The Privacy Act places obligations on those who collect personal information, such as consumer data. These obligations include:

1. Protection against loss, unauthorised access, or misuse by reasonable security safeguards.
2. If it is necessary that information is disclosed to service providers, all reasonable steps are taken to prevent unauthorised use or disclosure.
3. Limiting the retention of information for no longer than the purpose for which the information may be required for.

The requirements of the Privacy Act will apply to any gas industry participant who receives personal information.

## **1.2 Issues**

### **Consumer data that is not personal information**

The Privacy Act only applies to personal information. For example, consumer data that relates to a trust or company may not have the benefit of the protections in the Privacy Act. There should be consistent access to customer data regardless of whether the data is personal information and the customer can rely on the rights and obligations in the Privacy Act.

### **Third party consent for access to consumer data**

Third parties (other than gas distributors) cannot require industry participants to provide them with direct access to consumer data. Some industry participants may be willing to provide third party access to consumer data with appropriate evidence of consumer consent, while others may require the data to be supplied to the consumer who will be responsible for passing on the data to the third party.

A consumer should be able to consent to a third-party having access to consumer data directly from the relevant industry participant. There are efficiency benefits in standardising the process to avoid the situation where consumers and third parties seeking access to consumer data have to follow different approval processes for each industry participant.

In the electricity industry, the process for third party access to consumer data is regulated through the Electricity Industry Participation Code (the Code). A standard form for consent is prescribed.

We don't believe that distributor access to consumer data should be considered under this issue for the following reasons:

1. Gas distributors have an ongoing contractual relationship with retailers through their use-of-system agreements. Combined with an overlay of the parties' obligations under the Privacy Act and experience with negotiation of electricity use-of-system agreements, it should be possible to reach an agreed position on the terms of access to consumer data. The agreed position is likely to be different to third party access.
2. The number of gas distributors and gas retailers is small in comparison to the number of consumers and third parties who may wish to access consumer data. There are also

far fewer gas distributors and gas retailers than electricity distributors and electricity retailers. The efficiencies associated with a standardised approach are lower.

3. Gas Industry Co has oversight of the terms of use-of-system agreements through other workstreams.

### **The length of time that consumer data is retained**

The Privacy Act requires that industry participants keep consumer data that is personal information for no longer than is necessary for the purpose for which information may be used. A retailer may determine that it is no longer appropriate that it keep historical consumption information for a consumer, particularly if a consumer is no longer a customer, or has switched to another retailer.

Historical consumption data can be valuable for consumers and third parties to develop a profile of a consumer's gas usage and make informed decisions about gas supply options. This is particularly the case for price comparison purposes where comparison will often require a year or more of consumption data.

In the electricity industry, the Code requires retailers to retain consumer data for a period that is 24 months prior to the request.

### **Timeliness of the provision of consumer data**

Currently there are no requirements or expectations around the timeliness of responses to requests for consumer data other than the requirements of the Privacy Act.

The Privacy Act provides for consumers to be able to access consumer data that is personal information and provides that a request must be complied with as soon as reasonably practicable and generally no later than 20 working days.

In most cases, it should be possible for consumer data to be made available sooner than 20 working days.

In the electricity industry, the Code requires consumption information to be provided no later than five business days after the date on which the request is made.

### **Standard format for provision of consumer data**

There is currently no standard format for making consumer data available. As a request for access to consumption data is likely to apply to an extended period (possibly months or years), a consistent and usable data format will enable the efficient use of this information.

We note that the electricity industry has developed standard templates and electricity information exchange protocols (EIEPs) to provide a standardised means for exchanging consumption data.

## **1.3 Recommendation**

Our recommendation is that Gas Industry Co facilitates the development of gas industry specific guidance that addresses the identified issues as well as related issues that may be identified during the development of the guidelines.

In our view, development of guidance is an appropriate response initially as:

1. Existing legal rights and obligations, such as the Privacy Act, already contribute to defining appropriate access to, use and security of consumer data. There is no need to duplicate these rights and obligations. Additionally, most of the identified issues relate

to operational or process matters regarding consumer data rather than matters of general principle.

2. The regulatory environment is likely to be impacted by the Consumer and Product Data Bill and therefore a non-regulatory approach is better able to respond to regulatory change.
3. Most gas industry participants are electricity industry participants and will already have experience regarding access, use and security of consumer data. We do not anticipate significant compliance issues.

In our view, the AGMI working group that we have established to consider issues around the roll-out of advanced gas meters is an appropriate forum for development of the guidelines followed by wider stakeholder consultation on draft guidelines.

In developing our recommendation, we considered the option of a centralised data provider as had been referenced by some stakeholders during informal discussions prior to issuing our Issues Assessment paper. This would align with the UK approach to access to advanced meter data, whereby a central data communications company collects and manages advanced meter data and provides data services to authorised parties such as retailers and network owners. While that type of solution may address some of the issues that we have highlighted, we believe that it would be both expensive and challenging to implement as an industry arrangement for the New Zealand gas industry. We note that the UK model relies on a regulated entity and rules relating to industry participant interactions with the regulated entity. We do not consider that this type of solution should be considered further at this point of time given the costs associated with a centralised data provider compared to any benefits associated with an incremental improvement in access gas advanced meter data and the small size of the New Zealand gas industry. It is also unclear how this type of solution would interact with the framework in the Consumer and Product Data Bill if that framework is extended to the energy sector.



## 2. Minimum data standards and file formats

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The AGMI working group broadly supported the development of a set of minimum standards for AGMI and the adoption of a standardised approach for recording and exchanging information. The market efficiency benefits of a consistent approach can be inferred from the experience in the electricity industry where there are multiple AMI providers and technologies.

### 2.1 Issue

The 2017 Gas Metering Review found that "A baseline of common terms and standards should help to ensure that all retailers' systems work with all meter owners' systems. A couple of submissions suggested that the gas industry should learn from the experience of the electricity advanced metering roll out, where a lack of minimum standards resulted in misalignment between metering data and retailer requirements in some cases and in poor outcomes for some customers."

In September 2017, Gas Industry Co issued an initial draft of a set of minimum metering standards for discussion<sup>6</sup>. At the time it was acknowledged that until a rollout began the development of an AGMI standard would be slow.

The issue was flagged in the 2020 Issues Paper and submitters again supported Gas Industry Co developing an AGMI guideline covering minimum standards. Our recommendation, for a non-regulatory guideline approach, was preferred due to:

- consistency with the approach taken in electricity; and
- more flexibility than a regulatory arrangement, which is particularly important in relation to a developing technology/emerging market.

### 2.2 Recommendation

We continue to believe that guidance on AGMI minimum standards would be beneficial and that the non-regulatory approach is the correct course of action at this stage. We will work with the AGMI working group to agree on the form and content.

Consistent with submissions on the Issues Paper and discussion with the AGMI working group, we consider that the AGMI guideline should not be prescriptive regarding metering solutions or technology, as we do not want to create a barrier to innovation.

Similarly, while there are perceived benefits to requiring open access AGMI systems, we consider that given the small size of the gas industry, and the relative ease of modern technology platforms to provide interoperability, it is not necessary to mandate this requirement.

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<sup>6</sup> <https://www.gasindustry.co.nz/assets/WorkProgrammeDocuments/5717201709-draft-minimum-metering-standards-ID-22269.pdf>

In addition, we do not expect the AGMI guideline to be as broad in scope as the equivalent guidelines in electricity.<sup>7</sup> The functionality of an electricity smart meter, coupled with the dynamics of the wholesale electricity market, means that there is a demand for various types of information from electricity meters (for example, load control, energy import/export) that either does not exist in gas, is not measured by the meter, or has little market value.

## **2.3 File Formats**

### **2.3.1 Regulated file formats**

File formats for regulated processes, such as submitting consumption information to the allocation agent, or updating registry ICP parameters, are determined, in accordance with each set of rules, by Gas Industry Co in consultation with industry. Any amendments to these file formats to provide for AGMI will use the existing change processes set out in the associated rules.

Specific changes are discussed later in this paper in the individual sections for downstream reconciliation and the gas registry and we expect to use the AGMI working group to assist with drafting appropriate new or amended file formats before consulting more broadly.

### **2.3.2 Non-regulated file formats**

Gas Industry Co facilitates the publication of several non-regulated file formats (gas information exchange protocols or GIEPs) which are used for industry information exchange. Alongside the development of the AGMI guideline, we will discuss with the working group whether there is appetite for new non-regulatory, industry-wide file formats.

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<sup>7</sup> [https://www.ea.govt.nz/documents/217/Guidelines\\_on\\_advanced\\_metering\\_infrastructure.pdf](https://www.ea.govt.nz/documents/217/Guidelines_on_advanced_metering_infrastructure.pdf)



## 3. Gas registry and switching process changes

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The gas registry is the database of record for ICP-related information, including network, retailer, and metering parameters. The rollout of advanced gas meters will impact existing fields in the registry and there may be appetite to capture new information if it has value to registry participants. The registry also facilitates customer switching and we should consider whether the advanced metering rollout could improve the current switching process.

### 3.1 Issue

Potential changes to the gas registry and switching arrangements for advanced metering were canvassed in 2017 but it was deemed too early at the time to determine which changes would have a future benefit. The 2021 issues paper (and submissions thereon) suggested a number of possible additional fields that could be populated relating to the meter, what it records, and how it is used.

The AGMI working group discussed registry changes in detail and noted that there should be clear benefits to making any amendments due to the wide industry system impacts and associated costs. The discussions focussed on a few key areas:

- Roles and responsibilities relating to metering
- ICP parameters in the gas registry
- Switching process and timeframes

### 3.2 Recommendation

#### 3.2.1 Meter Owner role

The AGMI working group considered whether roles and responsibilities for metering in the gas registry and the Switching Rules may need to be updated with the introduction of advanced metering. We observed that the gas registry already provides for a multiplicity of GMS owners but only a single party (the responsible meter owner) has obligations under the Rules to maintain ICP parameters. We discussed whether there is a likelihood that the owner of the 'advanced' components of the GMS may be different to the meter owner and, if so, whether there would be a benefit in that party populating information that is distinct to the information populated by the meter owner.

According to recent registry data, there are close to 50,000 advanced meters now installed. Of these ICPs, fewer than 10 have an advanced meter owner that is different to the responsible meter owner. This indicates that the parties installing advanced meters are the parties that already have the responsibility for those ICPs in the registry.

At this stage, having discussed with industry participants at the issues paper stage and in the working group, we do not consider that there is a strong possibility that a third-party advanced meter owner, distinct from the existing meter owner, would need to populate

information in the gas registry. We therefore do not propose any changes to the meter owner roles and responsibilities. If we determine that advanced meter information should be populated and maintained in the registry, then the responsible meter owner will continue to have that obligation.

### **3.2.2 ICP parameters in the gas registry**

The AGMI working group agreed that the gas registry should separately identify:

- the capability of the GMS installed at a consumer installation; and
- the method that the responsible retailer is using to reconcile each ICP

We considered adding further meter/register content information to the gas registry in the last set of amendments in 2014, but at the time this would have only benefitted TOU meters (about 500 ICPs out of a population of 300,000). With the much larger rollout of advanced gas meters, the benefits to expanding the information held in the registry will be more widespread.

We believe that a single extra ICP parameter, maintained by the responsible meter owner, would be sufficient to capture the required information on the capability of the GMS. Like other registry fields, the values would be determined by Gas Industry Co in consultation with industry and could be amended from time-to-time, which would allow for flexibility and future proofing. The field could also be used to populate information about TOU ICPs that is currently conveyed in the GTN, for example, whether metered gas volumes are pressure and temperature corrected.

We think that a new allocation group should be created for AGMI ICPs (or one of the unused allocation groups should be repurposed) to recognise that these ICPs are distinct from both legacy interval-read mass market consumers and from large TOU consumers.

We also propose creating new values for the profile codes, by way of a Gas Industry Co determination, to capture the submission of aggregated daily data that has been sourced from AGMI. The only profile codes currently used are XTOU and GGRP, for TOU and mass market customers respectively. The Rules also allow for dynamic deemed profiles for allocation group 5 consumers and static deemed profiles for allocation group 3 consumers, but these have never been used.

We consider that the combination of allocation group and profile code (both existing registry fields maintained by the responsible retailer) is sufficient to identify how the retailer is reporting consumption. Therefore, no new retailer registry parameters are proposed.

### **3.2.3 Switching process & timeframes**

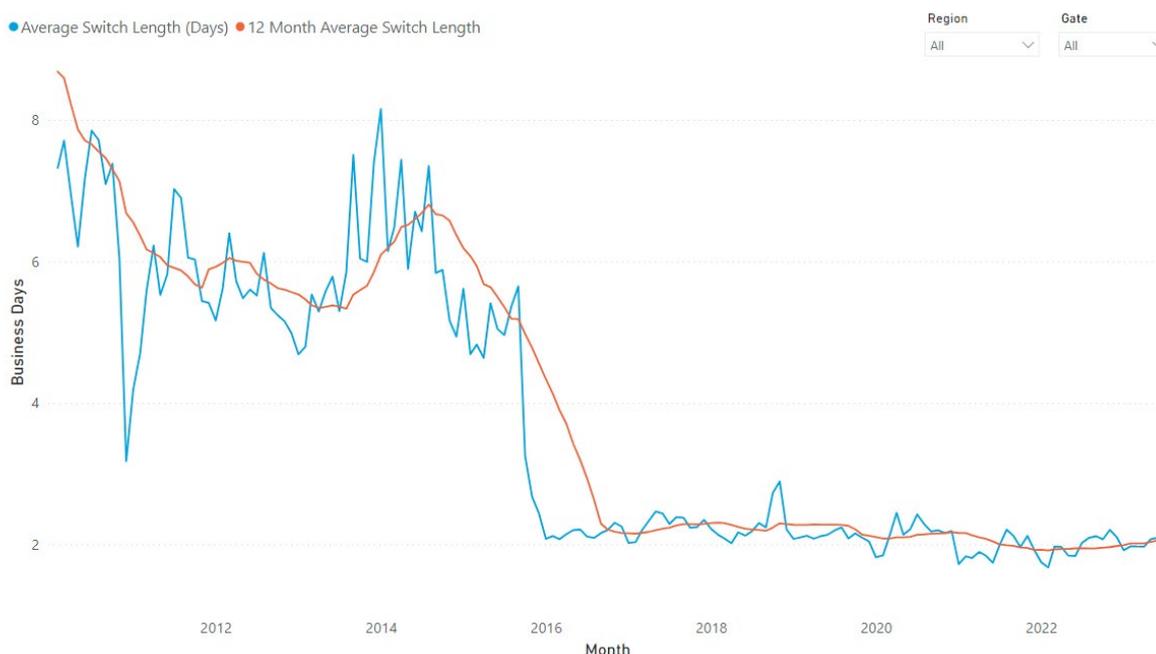
The current gas switching process involves two or three steps:

- the requesting retailer sends a GNT notice to the responsible retailer, including certain details such as the type of switch and, optionally, a requested switch date;
- the responsible retailer can then respond with an acknowledgement notice (GAN), which communicates a response code and an expected switch date, which can be aligned with the consumer's monthly billing cycle;
- the responsible retailer completes the switch by sending a GTN notice on or close to the switch date, which includes a switch read (that may be estimated) and details of the meter setup.

The rollout of advanced gas meters could allow some streamlining of this process, for example, switch reads could be communicated within 24 hours, removing the need for estimation, and could be provided by the meter service provider rather than the responsible retailer.

The main benefits of these changes would be more timely switching and more accurate switch reads. However, we believe that switching timeframes are already at an excellent level (as illustrated below) and the number of switch read renegotiation requests suggest that there isn't any significant concern with the accuracy of switch reads<sup>8</sup>. Hence, we do not propose any changes to the switching process or timeframes as the marginal benefits would be unlikely to exceed the cost of implementation.

**Figure 1: Average Switching Length**



<sup>8</sup> Switch read re-negotiation requests peaked during the COVID lockdown period at 6.5% of completed switches but have since fallen to 4.3% of completed switches and continue to trend downwards. Acceptances of switch read re-negotiation requests currently sit around 3.4% of completed switches



## 4. Downstream Reconciliation and D+1

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The Reconciliation Rules and associated systems and processes (including D+1) need to be amended to provide for advanced gas metering. By including AGMI data in the allocation processes this should improve the accuracy of retailer allocations and reduce UFG. This will better support the purpose of those Rules, which is to enable the fair, efficient, and reliable allocation, and reconciliation of downstream gas quantities.

### 4.1 Issue

As with the Switching Rules amendments considered above, the issue here is the impact of the rollout of advanced gas meters on an existing set of governance arrangements, the Gas (Downstream Reconciliation) Rules 2008.

Gas Industry Co is obliged to ensure that all our governance arrangements remain fit-for-purpose as gas market systems and technologies advance. In this context, we do not consider that an assessment of non-regulatory alternatives is feasible for the below proposals.

### 4.2 Recommendation

Following discussion with the AGMI working group, we consider that incorporating AGMI into the Reconciliation Rules will, at a minimum, impact on the following areas, which are discussed in more detail below.

- allocation group definition
- metering interrogation requirements
- submission of information to the allocation agent
- allocation methodology and UFG calculation
- determination of G1M gas gates
- residual profile and daily shape values

#### 4.2.1 Allocation group definition

As mentioned in the section on registry changes, we propose to define a new allocation group for retailers with AGMI customers, to make these ICPs distinct from TOU ICPs (large C&I customers in AG1&2) and legacy mass market ICPs (customers in AG4&6). Our intention would be that retailers use this allocation group only for those ICPs where they:

- can reliably record and download daily metered energy quantities and
- intend to submit daily metered energy quantities to the allocation agent.

We believe that placing AGMI ICPs in a separate allocation group is the easiest way to clarify the particular obligations that will apply to retailers with AGMI customers, for example, metering reading requirements, submission requirements, and how UFG is applied.

#### **4.2.2 Metering interrogation requirements**

We intend to modify the existing meter reading requirements to include appropriate criteria for how and when consumption information is recorded for the ICPs assigned to the AGMI allocation group. If an ICP is assigned to this allocation group, then the retailer should be able to demonstrate that consumption volumes for that ICP are being reliably downloaded and submitted to the allocation agent.

#### **4.2.3 Submission of information to the allocation agent**

We will propose, in consultation with participants, a file format specification to submit AGMI consumption data to the allocation agent. This will likely be similar to the existing GAS060 format, which is used for submitting aggregated daily volumes for multiple ICPs, rather than the more granular GAS050 format, which is used for daily volumes for individual ICPs.

#### **4.2.4 Allocation methodology and UFG calculation**

The AGMI working group agreed that submissions of daily-metered volumes for AGMI ICPs should be treated equally with TOU ICP volumes for UFG allocation. That is, they should have the annual UFG factor applied rather than the monthly UFG factor. We will therefore propose appropriate amendments to the global allocation methodology and calculation of UFG factors to achieve this.

#### **4.2.5 G1M determination**

As the advanced gas meter rollout continues and market penetration increases, it will become likely that the residual mass market volumes (i.e., non-daily metered volumes) at some networks will be a small minority of the overall throughput. If the annual UFG factor is applied to the majority of gas consumption at a gate this can cause unfair and unpredictable UFG allocations to the residual mass market.

If and when this situation arises, we consider it appropriate to apply the G1M allocation methodology, as is used currently when TOU volumes dominate network throughput. The existing process to calculate and determine G1M gas gates would be amended to include AGMI volumes as well as TOU volumes. Where those volumes exceed a certain threshold (currently 80%), the G1M allocation methodology will be used at that gas gate, meaning a monthly UFG factor will be applied to all consumption volumes.

#### **4.2.6 Residual profile and daily shape values**

Another consequence of increased AGMI penetration at a gas gate will be that the gas gate residual profile (the difference between injection volumes and TOU+AGMI allocations) will trend downwards over time. This will create an issue if the residual profile continues to be the basis for the published seasonal adjustment daily shape values (SADSV), used by retailers to profile read-to-read volumes of mass market customers. To ensure that it remains fit-for-purpose, we propose amending the SADSV calculation to include AGMI volumes in the daily shape values. We believe this should preserve the correct seasonal shape for profiling mass market reads.

### **4.3 D+1**

A further set of proposals relate to the D+1 system and D+1 allocation service provided by the Allocation Agent. Though D+1 is currently in a pilot phase, underpinned by a set of industry agreements, Gas Industry Co intends to transition D+1 into the Reconciliation Rules imminently.

D+1 uses the best information available the day after gas has flowed to estimate each retailer's gas deliveries. Currently the D+1 system receives daily data for gas gate injections and for AG1 ICPs. Volumes for AG2 ICPs and the mass market are estimated using regression models.

We consider that AGMI data should be submitted to the D+1 system each day to increase the accuracy of D+1 allocations. As well as increasing the 'known' data for the previous day, we believe there will be further benefits:

- the residual mass market allocated volumes will be smaller (and therefore the estimation errors will be smaller) and
- the accuracy of the mass market regression models could potentially be improved as the aggregated AGMI data will provide a timelier demand dataset to supplement the initial, interim, and final allocation data that is currently used to train the models.

When we issue a Statement of Proposal to put D+1 into the Reconciliation Rules, we will include amendments to the D+1 allocation process to incorporate AGMI data. The proposals will be consistent with the above changes proposed for the existing allocation process, for example, recognising AGMI data as a separate allocation group.

We will consult with industry, via the AGMI working group and/or the DAWG, on the most efficient process and format for providing AGMI data to the D+1 system.



## 5. Alignment of GMSAs

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Gas Metering Service Agreement (GMSA) terms could potentially be standardised to remove barriers for new metering service providers entering the market and to promote efficiency by lowering transaction costs for retailers and metering service providers.

### 5.1 Issue

The metering service market (provision of hardware and data management) is not regulated as it is not a monopoly business and in theory a competitive market should evolve over time. However, there is a concern that due to the small size of the New Zealand market, only a small number of participants will share the market and that the concentration of market power will affect competition.

There is also currently no distinction between a metering equipment provider and the metering owner as there is in the electricity industry. There is a much larger metering market in the electricity industry and higher commercial value of metering information due to the very different nature of the electricity market (reconciliation and clearing based on half-hour metered consumption, TOU tariffs, spot exposure, future market, optimising operation of assets etc) compared to the gas market.

However, the material alignment of core terms, for example in the Vector AMS template and Powerco standard GMSA, include terms, service definitions and performance standards expected in today's market for any metering services show that commercial industry agreements can be balanced and addressing these concerns.

Therefore, there is at this stage no evidence that regulatory intervention is necessary and more standardised arrangements through a model GMSA, benchmark terms or contracting principles are required.

### 5.2 Recommendation

At this point in time, Gas Industry Co doesn't see that there are material efficiency gains through common GMSA terms. Gas Industry Co recommends that this issue can be revisited if there is any evidence of inefficient market operation to the detriment of gas retailers or consumers.

The Commerce Commission is aware of the issue of potential market power concentration and continues to pay attention to the pricing of gas metering services in future, as they do with pricing in any infrastructure sector where competition concerns have been identified.<sup>9</sup>

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<sup>9</sup> [https://comcom.govt.nz/\\_\\_data/assets/pdf\\_file/0022/62572/Preliminary-assessment-of-whether-to-conduct-a-Part-4-inquiry-into-gas-metering-services-1-April-2016.PDF](https://comcom.govt.nz/__data/assets/pdf_file/0022/62572/Preliminary-assessment-of-whether-to-conduct-a-Part-4-inquiry-into-gas-metering-services-1-April-2016.PDF)



## 6. GMSA payment provisions

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Stakeholders were concerned that retailers' obligation to pay for metering services at a disconnected ICP could be introduced.

### 6.1 Issue

At this point it is unclear whether there is an issue. It is current industry practice that on the disconnection of a gas customer's ICP, the retailer's obligation to pay for gas metering services at that ICP is typically suspended until the ICP is reconnected. This is a pragmatic industry practice which seems to work.

Any allocation of costs between retailers and meter owners/metering service providers is a matter for those parties.

### 6.2 Recommendation

No action required. If issues flow down to consumer contracts, then a change to the Retail Contracts Scheme could be considered.



## 7. Cost and benefit to consumers

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From a consumer perspective it is important that the deployment of advanced gas meters increases market efficiency and that the benefits of deployment outweigh the costs to end consumers.

### 7.1 Issue

Gas Industry Co considers it important to ensure that the increased benefits to end consumers related to the deployment of AGMI outweigh any potential cost increase to these consumers.

However, the contestable nature of the market means that AGMI uptake will only become ubiquitous if it lowers overall costs or adds significant benefits for retailers or their customers.

Gas Industry Co considers the benefits of a gas smart meter roll-out sit mainly with the retailers and not with the consumer:

- avoided physical meter reads and related costs
- avoided HSE risks associated with physical meter reads
- better back-end integration (reconciliation, billing, switching, integration with electricity billing systems)
- more accurate wholesale gas and network charge reconciliation
- more accurate annual UFG allocation
- more efficient balancing

These potential benefits suggest that these benefits more than outweigh the cost of AGMI deployment costs, meaning that end consumers will not pay more for metering services, despite potentially receiving an enhanced service. Due to the very different nature of the gas market (no volatility due to contracted wholesale prices, no spot market exposure, etc.) to the electricity market (cost reflective network pricing, potential exposure to 48 different spot prices per day, load control capability, multiple traders on one ICP, etc.) gas smart meters do not provide for the same consumer benefits as electricity smart meters do.

In the competitive gas metering market, it is up to retailers to improve internal processes by using gas smart meter data to make a business case to potentially passing on cost savings for their customers' benefit.

In this context, a large Metering Service Provider (MSP) communicated that it does not intend to charge a higher lease fee for advanced gas meters over existing meters where there is no data service.

### 7.2 Recommendation

Gas Industry Co recommends keeping a 'watching brief' on the deployment of AGMI, monitoring the relative costs and benefits to consumers. Any monitoring activity may require retailers and MSPs, from time to time, to provide the relevant information to Gas Industry Co.



## 8. AGMI redundancy risk

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There is a risk that AGMI deployed now will become redundant before the end of the useful economic life of that equipment, due to Government policy settings aimed at phasing-out of fossil-fuel derived gas as a fuel source in New Zealand.

### 8.1 Issue

For capex decision, parties must weigh up benefits of AGMI vs expected lifetime of the asset. Government policy settings in relation to terminating existing residential gas connections are unclear at this point. The allocation of costs between retailers and meter owners reflecting a potential redundancy risk is a matter for those parties. Ultimately the cost of that potential risk will be passed on to consumers through gas retail pricing.

### 8.2 Recommendation

No action required. This issue can be revisited if there is a policy setting in place.



## 9. Advanced meter displacement

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The replacement of a smart meter by another smart meter provider before the end of its economic life creates inefficiencies.

### 9.1 Issue

There is no regulation in the gas markets that prevents one MSP's metering installation being displaced by another MSP's metering installation at an ICP. This is the case, when the consumer switches its retailer, and the new retailer has a different MSP than the incumbent retailer. It creates an economic inefficiency when a smart meter is replaced by another smart meter before the end of its economic life.

Whilst Gas Industry Co notes the unregulated approach to this issue in the electricity market, and the potential competition benefits of such an approach, Gas Industry Co believes that there is a minor risk of economic inefficiency of replacing functional advanced metering equipment with remaining economic life, with replacement advanced metering equipment.

However, given the much smaller size of the gas market (300,000 residential and small commercial ICPs) compared to the electricity market (almost 2,000,000 residential ICPs), fewer participants and a slower deployment rate, Gas Industry Co believes that there is no case for regulatory intervention at this stage. Participants should be able to negotiate commercial solutions if the issue becomes material.

### 9.2 Recommendation

Gas Industry Co proposes to keep a 'watching brief' on advanced meter displacement activity in the gas metering market to determine materiality of the issue requiring intervention.



## 10. GMS ownership and standard

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Gas meters form part of a wider gas measurement system (GMS). The deployment of smart gas meters could result in split ownership GMSs, with the MSP owning the meter and potentially the regulator, and the distributor owning the balance of the GMS equipment.

### 10.1 Issue

Some distribution network companies may prefer to have ownership of the entire GMS at all ICPs on their networks, as a single point of control might deliver efficiency and safety benefits operating and maintaining the network and GMS infrastructure.

Thus, in the case of advanced gas meters deployed on these networks by a third-party MSP, the network company would wish to become the advanced meter owner, to ensure the entire GMS remains under the control of a single party.

On open access gas distribution networks, the retailer at an ICP can select its own MSP for the ICP, in some cases resulting in split ownership GMSs, with the MSP owning the meter and potentially the regulator, and the network company owning the balance of the GMS equipment.

An MSP might carry out non-meter GMS work at an ICP, at the same time as it replaces the legacy meter with an advanced gas meter, including upgrading inefficient gas venting valves with more efficient gas overpressure valves, or making necessary safety modifications.

Necessary changes, whether required for safety or efficiency, to a GMS at the same time as the installation of a new advanced gas meter is carried out is more efficient. The GMS owner's consent might be required for this work to proceed.

Gas Industry Co considers that GMS split ownership would not create significant operational inefficiencies and there is no need to regulate GMS asset ownership.

Parties making non-meter GMS changes on third party distribution networks should have a commercial agreement in place, covering in particular responsibility for the costs of these changes, determining who will have ownership of the modified GMS, any reasonable exchange of value between MSPs for legacy GMS equipment and determining when changes to a GMS are able to be made to ensure a distribution network owner's return on investment in a GMS is not unnecessarily affected.

Gas Industry Co considers that detailed commercial arrangements required to address these issues will evolve.

### 10.2 Recommendation

Gas Industry Co recommends monitoring competition in the market, the costs and benefits to consumers and any impact of GMS ownership issues. In the case of ownership issues potentially resulting in monopoly ownership structures blocking competition, regulatory intervention might be required. However, decisions on the regulation of GMS providers under

part 4 of the Commerce Act is a question for Parliament and the Commerce Commission, not Gas Industry Co.



## 11. Advanced Metering consumer education

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Consumer education and communication plays an important role during deployment of gas smart meters and should address commonly asked questions about the technology helping consumers understand the importance of smart meters and their benefits to people and the environment.

### 11.1 Issue

Whilst Gas Industry Co considers that the provision of educational advice forms part of its function (see GPS Item 13 requiring Gas Industry Co to pursue outcomes where "The respective roles of gas metering, pipeline and gas retail participants are able to be clearly understood" and "Good information is publicly available on the performance and present state of the gas sector"<sup>10</sup>), it considers that retailers and industry associations such as GasNZ are well-placed to perform this educational role.

### 11.2 Recommendation

Gas Industry Co recommends that retailers and GasNZ provide educational information to consumers with the support of Gas Industry Co.

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<sup>10</sup> <https://www.gasindustry.co.nz/assets/DMSDocumentsOld/rules-and-regulations/4791GPS-2008.pdf>



## 12. Market competition

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The 2017 Gas Review found limited competition in the gas metering market, due to retailers generally selecting the relevant distribution network owner's MSP as the metering service provider.<sup>11</sup>

### 12.1 Issue

It was also noted there seem to be limited incentives on parties to contract separately for distribution and metering services, as there is no real service differentiation between metering providers, and there were efficiencies associated with combining the relationships.<sup>12</sup>

Gas Industry Co considers that smart gas meters provide for the opportunity to develop a service differentiation. The level of a potential service differentiation provided to retailers and consumers may enhance the level of competition. However, Gas Industry Co is aware that the very limited size of the market only allows for a very limited number of MSP. This issue should be resolved by the market.

### 12.2 Recommendation

No action required. Gas Industry Co reiterates that it is supportive of industry-led market settings that encourage increased competition, as these are consistent with its GPS efficiency and fairness objectives. It also notes decisions on the regulation of GMS providers under part 4 of the Commerce Act is a question for Parliament and the Commerce Commission, not Gas Industry Co.

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<sup>11</sup> Analysis of 17 months of registry data up to May 2016 confirms ~100% (> 99.9%) alignment between the MSP chosen by retailers and the related network owner. Gas Metering Review – review of metering service provider arrangements, 1 March 2017, page 5.

<sup>12</sup> Gas Industry Company Analysis of submissions and metering review, September 2017, page 1.



## 13. Preferred supplier provisions in legacy GSMAs

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There are provisions in some legacy GSMAs related to a preferred supplier status and/or first right of refusal extended to retailer-initiated third-party meter replacements and upgrades.

### 13.1 Issue

These provisions oblige a retailer to choose a particular MSP for retailer-initiated third-party meter replacements and upgrades. Generally, this would be the distribution networks preferred MSP.

Any enforcement of this provision practically means that the retailer potentially cannot freely choose its preferred MSP which would lead to further aggregation of the gas metering service market, reducing competition.

Gas Industry Co is of the view that preferred supplier provisions could potentially be removed by contracting parties from legacy GSMAs to increase competition. This is consistent with the GPS efficiency and fairness objectives.

### 13.2 Recommendation

The terms and conditions of access to gas meters by gas retailers is a purpose for which gas governance regulations may be made on the recommendation of the Minister (based on recommendations made by Gas Industry Co (section 43G(2)(f) of the Gas Act).

At this stage Gas Industry Co has no evidence that the existence of these provisions is a major issue requiring regulatory intervention.

Decisions on the regulation of GMS providers under part 4 of the Commerce Act are a question for Parliament and the Commerce Commission. However, the Commerce Act applies only to open access networks, so that excluded networks can not be regulated.



## 14. Remote disconnections and reconnections

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Smart gas meters provide for the functionality of remotely disconnecting/isolating and reconnecting supply to a gas installation. This functionality has the potential to save operational costs but there is also an inherent H&S risk associated with remote reconnections.

### 14.1 Issue

Participants would mainly use the disconnection/reconnection functionality to disconnect ICPs from gas supply for non-payment and to reconnect supply accordingly.

Therefore, [regulation 52A](#) of the Gas (Safety and Measurement Regulations) 2010 applies in cases of a reconnection of gas supply to a gas installation on which no general or high-risk gasfitting work has been done.

Regulation 52A requires a person reconnecting or restoring gas supply to a gas installation to rely in good faith on written confirmation by the owner that no gasfitting work has been undertaken during disconnection/isolation; to ensure safe operation of the installation following reconnection;

- to immediately disconnect if the gas installation is not operating in a safe manner.

The remote disconnection/isolation process is not prohibited under the regulatory framework as it is not considered as being "gasfitting" under the definition in [section 5](#) of the Plumbers Gasfitters, and Drainlayers Act 2006.

However, regulation 52A was designed to require physical presence of the person reconnecting but doesn't explicitly exclude that a reconnection, safe operation check and immediate disconnection in case of unsafe operation can't be done with the person undertaking these compliance requirements not to be on-site.

### Managing the Health and Safety risk

The remote reconnection of gas supply to a gas installation carries an inherent H&S risk which needs to be minimised in case of remote operation of the meter. The safety check before and after reconnection required under regulation 52A relates for example to the safe reconnection of appliances, the check of older appliances before relighting them, and general safety of the installation. In theory, these checks could be carried out remotely with the customer communicating online with qualified staff via smart phone. Gas Consumer Care Guidelines<sup>13</sup> already provide the expectation that "Remote Gas reconnections should only occur if the Retailer can reasonably satisfy itself that the reconnection can be completed safely."

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<sup>13</sup> <https://www.gasindustry.co.nz/assets/CoverDocument/Gas-Consumer-Care-Guidelines.pdf>

The development of a standard process agreed by market participants (MSPs, retailers, network owners) for the safe disconnection and reconnection of gas ICPs, through the remote disconnection and reconnection functions in advanced gas metering, could address the H&S aspects of the reconnection and help to facilitate the timely delivery of the benefits which may flow from this technology.

Even with the strictest procedures detailing the remote reconnection process there will always be a residual risk.

It is worth noting that Ofgem (UK) confirmed that there have been zero remote disconnections and reconnections for gas smart meters carried out by gas retailers since Ofgem began to collect data on this issue in 2016.

## **14.2 Recommendation**

Gas retailers confirmed that even if it would be possible to design a process to remotely reconnect, they are currently not willing to take the inherent risk of a reconnection under H&S aspects, and consequently no action is required at this stage.

Participants suggested that it would be useful to clarify what qualification a person would be required to hold to reconnect a gas installation on site. As the reconnection is potentially not gas fitting work, the specific task could potentially be carried out by a person other than a qualified gasfitter but specifically trained to do this kind of work.

This would require the industry to engage with Worksafe and the Plumbers, Gasfitters and Drainlayers Board. If needed, Gas Industry Co could support this process in a facilitating role.



## 15. Multiple trading relationships

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The Electricity Authority identified that the restriction to only one trader per ICP was a barrier for the introduction of innovative products in the electricity industry but there is currently no regulation in place to enable MTR in the electricity sector.

### 15.1 Issue

The structure of the electricity market, in particular the half-hour spot pricing in the wholesale market, the capability of residential ICPs to participate in demand side response and the options around selling electricity back to the network provide many opportunities for consumers using smart meter functionalities to choose innovative products from retailers and service providers, which enhances competition in the retail market.

The gas market lacks this flexibility. Gas Industry Co can't see a viable use case for multiple trading relationships in the gas retail market.

### 15.2 Recommendation

No action required. For the time being we will continue to assess making changes where there is a clear benefit.



## 16. Critical Contingency Regulations

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Gas smart meters have the functionality of remotely disconnecting and could support curtailment in a critical contingency event.

### 16.1 Issue

This functionality could potentially be used to curtail load under schedule 3 of the Gas Governance (Critical Contingency Management) Regulations 2008 (CCM Regulations) in case of a critical contingency event. Curtailment of band 6 includes small commercial consumers.

However, the purpose of the CCM Regulations, amongst other, is to achieve the effective management of critical gas outages and pipeline events. These events are managed by the CCO and potentially require curtailment of larger loads first.

The load curtailment, which could potentially be provided by small commercial consumers is so small that it is neither pragmatic nor effective to design rules regulating small consumer curtailment by using a gas smart meter.

The H&S aspect discussed above in section 14, would require physical presence for a reconnection. This means that the reconnection of many very small loads would take a long time associated with high operational costs and, therefore, would be inefficient.

### 16.2 Recommendation

No further action required.

## About Gas Industry Co

Gas Industry Co is the gas industry body and co-regulator under the Gas Act. Its role is to:

- Develop arrangements, including regulations where appropriate, which improve:
  - **the operation of gas markets;**
  - **access to infrastructure; and**
  - **consumer outcomes;**
- Develop these arrangements with the principal objective to ensure that gas is delivered to existing and new customers in a safe, efficient, reliable, fair and environmentally sustainable manner; and
- Oversee compliance with, and review such arrangements.

Gas Industry Co is required to have regard to the Government's policy objectives for the gas sector, and to report on the achievement of those objectives and on the state of the New Zealand gas industry.

### SUBMISSIONS CLOSE:

By 5pm Monday 4  
September 2023

### SUBMIT TO:

[consultations@gasindustry.co.nz](mailto:consultations@gasindustry.co.nz)

### ENQUIRIES:

[info@gasindustry.co.nz](mailto:info@gasindustry.co.nz)