Analysis of submissions on gas metering review

1. Consultation

Gas Industry Co commissioned two papers on gas metering issues: *Gas Metering Review: Review of metering service provider arrangements* (Metering Services Paper) and *Gas Metering Review: Review of advanced metering technology* (Advanced Metering Paper). The papers described current metering arrangements, spelled out the possibilities offered by advanced metering, and assessed whether there were barriers to competition in the metering market or to deployment of advanced meters. Gas Industry Co released these papers, as well as a covering document that gave an overview of each of the review papers, and invited stakeholder feedback by 14 June 2017.

This work arose due to requests from stakeholders that we look into metering issues and is consistent with the Government Policy Statement on Gas Governance (April 2008) which seeks a number of outcomes, one of which is *"an efficient market structure for the provision of gas metering …services."* The Gas Act 1992 at section 43G(2)(f) provides the ability for the Minister of Energy to recommend regulations *"providing for terms and conditions of access to gas meters by gas retailers."* This work was signalled in Gas Industry Co's Statement of Intent 2016-2018.

Eight submissions were received, from Contact Energy, First Gas, Genesis Energy, Metrix, Nova, Powerco, Trustpower, and Vector.

2. Overview of submissions

2.1 Review of metering service provider arrangements

Competition

The Metering Services Paper observed that gas meter owners do not appear to be actively competing for connections, and the majority of submitters agreed. However, the lack of active competition is not due to a lack of metering providers. A number of submissions highlighted the fact that multiple metering companies can and do operate on the gas distribution networks, and retailers are open to dealing with multiple parties.

Rather, 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. As well, as the Metering Services Paper pointed out, having one party provide both network and metering services is operationally more efficient for retailers. It is also more efficient for the asset owner, as service calls can be made by a single field services team. As a number of submissions pointed out, the ability to connect a consumer with a single service call is also a benefit to the customer.

No particular concerns were raised with regard to the new connections process. It was noted that there should be a level playing field where parties can compete on any network to offer the best customer solutions. It is important that network owners do not unduly create barriers to competition, for example through their processes to accredit who can work on their network or through bundling their services.

Lack of service differentiation and familiarity with past commercial practices seem to be at the heart of the reasons why there are not more signed, unbundled gas metering services agreements (GMSAs). While there was support for the concept, the time and effort involved in

reviewing and moving to a new commercial agreement means that it is not a high priority for many market participants. A number of submitters expected the advent of advanced metering and the greater service differentiation it would bring would incentivise the parties to put separate metering agreements in place.

No particular concerns were raised in relation to preferred supplier provisions in GMSAs. Some submitters noted that such provisions can be used to protect meter owners' investment.

Alignment of GMSAs

The question of whether a model GMSA is necessary received mixed responses. Several retailer submitters said that a model GMSA would provide a good baseline for service levels and would be a useful benchmark in negotiating agreements. Other submissions, including those from current meter owners, considered that GMSAs are commercial agreements whose terms should be negotiated and agreed by the counterparties involved. There was a concern that the prescription of regulatory measures would stifle market innovation.

One submission suggested that rather than GMSAs, it is network use of system agreements that should be benchmarked. Gas Industry Co would like to point out this is the aim of its existing Gas Distribution Contracts Oversight Scheme.[1]

Rather than a model GMSA, nearly all submitters agreed that developing some minimum standards and a dataset would be a pragmatic step. This topic is explored more fully in the next section.

2.2 Review of advanced metering technology

Supporting the adoption of advanced meters

A clear theme that arose from submissions was that gas advanced metering is still in the early stages of development. There is uncertainty about what ultimately might be the right technical solution for the New Zealand market, given its relatively small size, lack of service definitions, and field conditions (meters are generally located outside). Committing to a specific technical solution now would limit the opportunities that new and emerging technologies can provide and would frustrate innovation. The market should be allowed to develop without regulatory intervention.

Minimum standards and file formats

At the same time, the majority of submitters (seven out of eight) considered that determining some minimum standards would be a pragmatic step to ensure a common understanding of what market participants want from advanced metering. A baseline of common terms and standards should also 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.

Further, as one submission pointed out, such a process could be useful in identifying important aspects that might otherwise be overlooked. For example, advanced meters should have a consistent way of treating daylight savings time, and ensuring this consistency at the outset would be simpler and cheaper than fixing the problem later.

[1] Information on this workstream can be found on our website at http://www.gasindustry.co.nz/work-programmes/gas-distribution-contracts-oversight-scheme/overview/

Given the level of support that submitters gave to the idea of a minimum dataset, Gas Industry Co intends to proceed with this work in conjunction with an industry technical advisory group, as laid out in Section 3 below.

Submitters agreed with the Advanced Metering Paper's conclusion that it is not necessary to specify particular file formats – the file format is less important than the content. Advanced meters can configure the required data in any format agreed between the meter owner and retailer.

Access to and security of data

Submitters generally agreed that consumers own their own consumption data and should be able to access the information easily. Some submissions highlighted that advanced metering data could be useful to third parties – to network owners, for instance, for network management purposes; or to service providers, to help develop their service offerings – and that there should be clarity around data access and protection.

Some submitters cited the open letter from the Privacy Commissioner regarding the bulk disclosure of metering data,[2] saying that consumers must be able to trust that their data are not being used for purposes they have not permitted.

Others noted that network agreements need to be clear regarding the use of data for network management. One submission took a slightly different perspective, stating that where the meter is recording additional data for the network owners (such as gas pressure or temperature), the meter owner should have the ability to charge for the provision of that information.

Potential process and registry changes

On the suggestion of recording ICP number on the meter, submissions noted that such a move could be useful, but there would need to be a clearer understanding of the costs and benefits it would entail. Gas meters are outside, and affixing a weatherproof label could be more expensive than the labels used in electricity. A couple of submissions noted that, if labelling were to be done, it should be done when a site is visited for another reason, rather than incurring the cost of a separate site visit.

On registry changes in general, submitters noted that it is expensive to maintain registry data, so requirements should be kept to a minimum; and registry changes are expensive, so any change would need to pass a cost-benefit test. Most submitters did not consider registry changes were necessary; others thought that it would be pragmatic to review the existing metering fields to ensure that they are appropriate for all technology types and to determine if any existing fields are extraneous (e.g, are both metering owner and advanced metering owner fields required?).

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[2] "Public statement about bulk disclosure of smart meter data", dated 26 May 2017. Available at https://www.privacy.org.nz/assets/Uploads/Open-letter-to-retailers-and-distributors-re-smart-meters-A504260.pdf. The letter states that "Bulk disclosure of individual household level smart meter data risks infringing individual privacy and damaging public trust in how the sector handles customer data.

"In order to avoid these risks, New Zealand electricity distributors should, in summary:

- Review their privacy statements and consider updating them to include assurances regarding the use of smart meter data;
- Review whether the individual household level data currently being provided by retailers could be aggregated and still meet network planning needs;
- Ensure that personal information is not collected unnecessarily, or held for longer than necessary; and
- Aggregate meter data where individual household level data is not required to meet network planning needs e.g., through amalgamating half-hourly data from small groups of households, or by receiving the half-hourly data at the street level."

There appeared to be little support for the suggestion of adding meter make and model to the registry, with a number of submitters stating that there was little practical value in such information.

In terms of changes that would support the introduction of advanced meters, some suggestions have already been canvassed by earlier work. Gas Industry Co notes that the 2015 amendments to the Switching Rules added a definition and a registry field for advanced meter, which would seem to address the suggestion for a code that would distinguish legacy from advanced meters. Consideration was also given previously to including more information about the configuration of ToU meters in the registry, but the proposal was not advanced: retailer account managers verify metering fields with the meter owner when a ToU customer switches in, so there would be little value in adding and maintaining additional registry fields for these meters.

A number of suggestions related to signalling the abilities of the meter – whether there is the ability to collect data remotely, whether that function is operational, and what the recording interval of the meter is. One submission suggested amending the definitions in the Switching Rules to make it clear that interval recording and remote data collection both need to be present for a meter to be considered advanced (so that a meter that was technically capable of remote communication but located in a cellular black spot would not be considered advanced).

Gas Industry Co notes that one option could be to change the way existing registry fields are used, instead of changing the registry itself. Profile code, for example, is a field in the registry that appears to be under-used: at the moment, it simply records whether an ICP's consumption is profiled on the gate residual profile (GGRP) or is based on ToU data (XTOU). Other categories could be created to signify the use of data derived from an advanced meter.

Other suggestions for amending the registry related to signalling other functions, such as the ability to disconnect and reconnect customers remotely.

Gas Industry Co does not intend to pursue any immediate rule changes or registry changes in relation to advanced metering, but we will monitor this area with the assistance of the industry technical advisory group.

Metering complaints

No issues relating to metering consumer complaints were raised. Some submissions noted that the complaints listed were more about meter access and reading issues than the meters per se. Meter reading complaints should decrease with the adoption of advanced meters, though they may be replaced to some extent with complaints about metering communications devices.

3. Next steps

Technical Advanced Metering Advisory Committee (TArMAC)

Gas Industry Co plans to convene a technical advisory committee to consider minimum standards for advanced metering and any necessary registry or rules changes. The terms of reference and selection criteria for the group are described in Appendix A.

Minimum standards

Gas Industry Co agrees that developing a set of minimum standards for advanced metering would be a pragmatic and useful step. Such standards should help to ensure consistent collection and treatment of metering data across the gas industry. Gas Industry Co envisages that the standards would not be regulated requirements, but rather would serve as a resource to industry stakeholders, providing a common frame of reference to parties considering investing in advanced metering services.

The set of minimum standards will be developed and maintained with the input and assistance of TArMAC. An initial discussion draft is attached as Appendix B.

Registry changes and rules amendments

As outlined above, Gas Industry Co does not see the need for immediate changes to either the gas registry or the Switching Rules to accommodate the uptake of advanced metering. However, one of the tasks of the industry technical advisory group will be to consider future developments in relation to advanced metering and to recommend changes if and when they do become necessary.

The following appendices can be found at the end of this paper:

A. Technical Advanced Metering Advisory Committee (TArMAC): Terms of reference and selection criteria
B. Advanced gas metering – minimum standards: Initial draft for discussion
C. Summary of submissions by question and submitter

Appendix A Technical Advanced Metering Advisory Committee (TArMAC)

Terms of reference and selection criteria

Gas Industry Co wishes to convene a technical industry working group to provide advice on issues related to advanced metering. The purpose of the group is twofold: to develop a set of minimum standards that will allow for the consistent collection and treatment of advanced metering data; and to identify any registry changes or rules amendments needed to accommodate the uptake of advanced metering.

Members of TArMAC will be drawn from industry stakeholders, including meter owners, distribution companies, and retailers. Members should have technical knowledge of and experience with gas metering.

Scope of work:

1. Develop a set of minimum advanced metering standards, by:

   (a) Identifying parameters that should be included; and

   (b) Determining what values those parameters should have;

2. Maintain and update the minimum advanced metering standards as required (review 6 monthly or annually);
3. Identify and consider any registry changes or rules amendments necessary to facilitate the uptake of advanced metering; and
4. Contribute to any analysis required to support 1-3 above.

Operation of TArMAC

1. Gas Industry Co will chair the group and provide secretariat support
2. Commitment to participate: membership in TArMAC constitutes a commitment to attend meetings and participate in the work of the group. There may be times, however, when schedules clash and a TArMAC member cannot attend: in these circumstances, an alternate person can be sent to a TArMAC meeting.
3. In participating, TArMAC members are acting as company representatives. In some cases, this may mean that decisions will need to be held until the next meeting, so that TArMAC members can canvass their colleagues' views about a particular issue.
4. At times, it may be appropriate for a TArMAC member to bring along a person from his or her company who has expertise or interest in a particular matter under consideration. · If a TArMAC member is sending an alternate or bringing an extra person, he or she should let the group know in advance.
5. Any TArMAC member can propose an agenda item or issue for the group to consider.
6. Attendance: members may attend meetings in person or remotely, using Skype for Business.
7. Minutes of the meetings will highlight the discussions and conclusions but will not record the who-said-what play-by-play.

Meeting papers, minutes, etc., will be published on the Gas Industry Co website.

Appendix B Advanced gas metering – minimum standards - Initial draft for discussion

Existing metering requirements

The Gas (Downstream Reconciliation) Rules 2008 (DR Rules) require that all metering equipment used to collect gas volume information complies with the New Zealand Standard *Gas measurement*, NZS 5259. As well, there are requirements in the DR Rules regarding the accuracy and handling of volume information. Some of these requirements seem particularly relevant to the attributes of advanced gas meters and are reproduced below for convenience.

NZS 5259

- **Integrity of data (2.2.6)**

  Data transmitted between components or stored with the GMS shall be accurate to meet the maximum permissible errors (MPEs) of Table 2 and Table 3 of NZS 5259

- **Traceability of data (2.2.7)**

  Every GMS shall accurately and traceably store or record data and transmit that data between components and indicating devices

- **Protection against external interference (2.2.8)**

  Every GMS shall, where practicable, be designed, manufactured, and installed in such a way that any interference or tampering capable of affecting the measuring accuracy is discouraged and becomes visible or readily detectable

- **Reliability (2.2.9)**

  Every GMS shall be capable of performing accurately and consistently taking into account any physical, chemical, and thermal conditions to which it is likely to be subjected and fulfil correctly its intended purpose throughout its service life.

  Electrically powered and electronic components of the GMS shall be capable of meeting the MPEs of Table 2 and Table 3 when subject to reasonably foreseeable:

  - Short-term fluctuations in electrical supply voltage;
  - Mains borne or radiated high frequency signals; or
  - Electrostatic discharge.

  Note: Electronic devices are required to meet electromagnetic compatibility requirements under the Telecommunications Act.

- **Indicating device (2.3.5)**

  Any meter or conversion device shall have a means to clearly show the quantity of gas measured.

  An indicating device shall (among other things):

  - Only be capable of being reset where the resetting is traceable or detectable
  - Be non-volatile (that is, able to show the last correct indication after the device has recovered from an intervening power failure)

- **Guidance on the accuracy requirements for the time parameter of time-stamped data (Appendix B) – References to New Zealand Standard Time**

  For time of use applications the reference shall be to NZ Standard Time (NZST)

Downstream Reconciliation Rules

- Every allocation participant must provide the information required under these rules in a manner that is
  - Accurate and complete; and
  - Not misleading or likely to mislead; and
  - Timely. (rule 26.2)
- Every retailer must ensure that the consumption information supplied to the allocation agent in accordance with rules 29 to 40 is transferred and stored in such a manner that it cannot be altered without leaving a detailed audit trail; and
- A copy of all register reading data is kept for a minimum period of 30 months and is made available to the allocation agent, industry body or an auditor on request (rule 28.4)
- Consumption days are defined in terms of New Zealand Standard Time (rules 29.4 and 30.1).

Advanced gas metering minimum standards

Function	Draft expectation / questions
Recording of consumption data	• Minimum time period for measuring? (hourly, half hourly, other?) • Metering system should include a visual indicating device that is able to be read manually (accumulating register?) • Record gas temperature and meter pressure? Faults and alarms?
Conversion of metering data	• Should the advanced meter convert gas flows into volume at standard temperature and pressure? • As per Appendix B of NZS 5259, time should be recorded in NZST; and the DR Rules require days defined by NZST. Given this, is there any need to convert to DST?
Access to metering data	• It is possible that the advanced metering services market will evolve such that one service provider will provide the metering assets, and a different service provider will remotely collect the consumption information and provide it to the retailer. Advanced meters should be configured in a way that allows third-party access. • To the extent that the advanced meter records information that could be useful for network management or reconciliation, such as gas temperature, meter pressure, faults, and alarms, those data should be able to be made available separately • Able to provide remote operation diagnostics? For example, should a CSR be able to remotely check on the status of a customer's meter? • What protocols are needed regarding access to data and protection of consumer data?
Provision of consumption data	• Should have the option of providing a single monthly consumption number for retailers with legacy systems • Should be able to provide daily consumption data to the allocation agent for D+1 allocations

	• Should be able to provide consumption data to consumers in a format that can be readily understood. Data should be supplied in the units for which the consumer is billed; e.g., kWh for mass market consumers.
Cybersecurity	• Particularly an issue with regard to meters that can remotely disconnect and reconnect. What protocols and protections are needed to ensure no unauthorised access of AMI functionality?

Appendix C

Summary of submissions by question and submitter

Question	Contact	First Gas	Genesis	Metrix	Nova	Powerco	Trustpower	Vector
1. Gas meter owners do not appear to be actively competing for new connections, and that retailers tend to choose the network owners' related metering providers. Do you agree?	Agree One party for metering & network gives operational efficiencies and seamless customers experience		Historical apathy No discernible difference between services provided by different metering providers AMI has potential to provide differentiated services	Retailers open to dealing with different parties for network and metering At present, no real service differentiation	Current arrangements reflect past commercial practices In network owners' interests to promote dealing with one party Networks should not be able to extract above market rents	Agree Powerco has not pursued supply of metering on other networks for cost and customer experience reasons. Large-scale rollout would be required to operate and maintain meters on another network Customer does not differentiate between connection and meter	Yes	Do not agree AMS offers meters on Vector, Powerco, First Gas distribution networks; Vector distribution allows any meter provider
2. Do you have experience with preferred supplier provisions in a GMSA? If so, what effect do you think it has on the market for metering services?	Clauses limit competition, but while no price or service differentiation, no incentive to invoke the clauses		No experience. Distinction between services from meter and meter itself – important because suppliers differ in services they can deliver rather than capability of hardware. Preferred provisions should be mutually agreed	No experience Preferred supplier provisions would be inhibitor if they prescribed a preferred meter owner or limited metering technology on the network	Provisions in electricity market relate to protecting meter owners' investment. No reason not to do so in gas. Networks should not have exclusive or restrictive arrangements with meter owners	Our agreements do not have preferred supplier provisions, but considering for future. One reason to have is to reflect joint investment with retailers to encourage new and maintain existing connections	Not an issue for Trustpower	Do not believe preferred supplier provisions have an impact on gas metering market, as they do not restrain retailers from using other meter providers
3. Do you have any observations or comments to make about new connections service request processes?	Agree with assessment in paper. No service or price differentiation, so little incentive on retailers to build alternative system	Ensure participants have a choice of metering provider – networks should not bundle services	Lack of distinction in gas metering services, so efficiency wins out Should be level playing field where parties can compete on any network to offer best customer solutions	Current process weighted towards certain meter owners, mostly due to limited options Network owners accredit who can work on network; should not be able to create barrier to competition	Retailers should be able to determine meter capabilities for a site	Retailers have a choice on Powerco network	Not an issue for Trustpower	Current arrangements reasonable
4. Do you agree that a model GMSA and benchmark terms are not required?	Model GMSA would provide good baseline for negotiations, particularly for new entrants		Model GMSA could provide minimum standards for meters, which would be useful (not having this was a mistake in electricity)	GMSAs are commercial terms, should not be standardised Network UoSAs should be benchmarked	Model GMSA could be useful in standardising service levels and as a benchmark in improving agreements	Model GMSA and benchmark terms not required	Model GMSA not required	Agree model GMSA and terms not required. Greater prescription would stifle market AMS has a template GMSA as starting point

Question	Contact	First Gas	Genesis	Metrix	Nova	Powerco	Trustpower	Vector
								for negotiation. It will need to be updated when AMI deployed, but imprudent to attempt to future-proof now
5. GMSA alignment	Need baseline of common terms, standards, services, processes for advanced metering. Without this, may have different requirements from each meter provider, which would impose extra expense on retailers		Alignment may be good for aspects (eg, certification and access to data); but some services should be able to be differentiated	Competition will drive market terms rather than regulatory measures	Alignment does not mean market is competitive; potential for significant disparity in charges between retailers.	Commercial factors will drive terms for GMSAs. Where possible, use standard clauses	As long as retailers can select metering provider, market forces will allow for best practice when AMI becomes commonplace	Expect new and innovative arrangements to emerge from commercial negotiations. Standard GMSA is inappropriate for emerging technology
6. Why do you think retailers may not be amenable to moving to separate network and metering services agreements?	If and when there is clear price and service differentiation between metering providers, retailers will want separate agreements so they can select best metering provider for their situation.		Do not agree. Distribution, metering, and data services should all be separate Separation of physical metering and services means should not be an issue when some meters are legacy and some are AMI. If advanced services not needed, then retailer would not need to pay for or take	Retailers will be more amenable to separate agreements once more competition exists	Current arrangements generally adequate; separate agreements low priority. Metering arrangements cross a number of areas of a retailer's business, so negotiating a new agreement is not a simple process	Time and effort retailers place on reviewing and moving to a new agreement can vary greatly	Support move to separate agreements	Do not believe retailers are not amenable to moving to separate network agreements
7. What is required to incentivise a move to signed, separate network and metering services agreements and what is the best path to achieving that?	Roll out of advanced gas meters		Parties should be left to make their own agreements. Distribution companies should not be able to use monopoly position to force same metering services contracts across all retailers	Moving to AMI will drive this process Commercial agreements; should be left to the parties	Leave commercial agreements to parties to work out. Will be given greater priority when AMI is more widely used Regulator should maintain watching brief to ensure networks not using anti-competitive practices	It is in the interests of all that signed agreements are in place. Support industry-led approach with monitoring by GIC	Gas AMI will lead to separation of network and metering agreements	GIC could stipulate a deadline
8. Including meter make and model on registry; and recording ICP on meter	Implement by change to GIC rules		Little value in meter make and model ICP number would be useful, but only if	From Metrix's experience in elec, costly to maintain registry info – only data to support billing and	Happy to include make, model, and type of meter in registry. Meter serial number is linked to ICP number.	Support changes if benefits outweigh costs. Not clear how the additional information	Support recording of ICP on gas meter	No benefit from including make and model in registry.

Question	Contact	First Gas	Genesis	Metrix	Nova	Powerco	Trustpower	Vector
			costless –eg, if visiting site for another reason	switching should be included Little benefit of make and model ICP ID appropriate but only if done as part of site visit	Cost likely to be more significant than for elec (because gas meters outside), so needs more thought.	would improve retailer operations		
9. Are there any other comments or feedback you would like to provide	Current model does not drive innovation or attract new entrants	Concerned about lack of transparency of GMSAs. Greater transparency would enable more level playing field for retailers. GMSAs should be published. Encourage GIC to set timeframe for GMSAs and network UoSAs to be published Recommend to ComCom to monitor profitability of metering	Metering agreements should be seen as less of a long term lease of an asset and more of a fee for services	Contestable metering model provides beneficial operating and commercial outcomes for industry, retailers, and consumers		n/a	No	Encourage restraint in imposing greater prescription
10. Do you have any comments or observations about the state of the advanced gas metering market?	None	Deployment of advanced meters should be encouraged, so consumers have benefit of the technology	Need to prepare for opportunities and challenges of AMI	Gas AMI less advanced than elec; NZ challenged by low volumes, specific services required not defined, field conditions (meters outside) Allow market to deliver right technical solution		Strongest demand for AMII is likely the commercial market due to D+1 Technology – remain uncertain as to "right" solution. Committing now would increase costs with no benefit to consumers Not aware of any complaints about our prices or of any factors limiting entry of meter providers	No	During review, a market participant replaced several AMS meters with its own – showing that there is movement in the gas metering market Entry of First Gas will change dynamics
11. Standard construct for services and minimum dataset required?	Agree	Support development of minimum services and dataset Metering requirements should apply across all gas networks – including LPG	File format less important than content In electricity, it was a mistake to focus too much on file format – would have been better to establish a minimum dataset. One meter	Pragmatic to agree minimum data set, but metering technology should not be mandated, as it would only drive up cost to retailers and consumers	No need to determine file formats till AMI available	Agree; support initiative to improve market arrangements and data accuracy where cost-effective. FFWG membership need to include gas distribution	Yes	No need for regulatory intervention Prescribing services will limit opportunities and frustrate innovation

Question	Contact	First Gas	Genesis	Metrix	Nova	Powerco	Trustpower	Vector
			provider had disconnect between interval data and meter register, rendering interval data useless for many functions					
12. Should Gas Industry Co request that the File Formats Working Group develop a standard construct for advanced metering services and a minimum dataset?	Should be set by working group under GIC	Support establishment of sector group to prepare an agreed data protocol for advanced meters Protocol would allow competition without need for systems to be able to handle multiple data formats	FFWG would be well placed to develop standard construct and minimum dataset, but should leave things like file type up to parties to agree.	File formats should not be mandated	Benefit to determining standards at early stage; process may identify some important aspects that may not be obvious at the outset – eg, ensuring consistent treatment of Daylight Savings Time	Yes, to scope issue and assess costs & benefits	Yes	No; see above Standardising file formats for a technology that is yet to be introduced on a mass scale will stand in the way of market competition and innovation
13. Consumption data belong to consumer, who should have ready access to the information. Do you agree?	Yes. Major topic; need to be dealt with in GMSAs. Also, parties need to take account of letter from Privacy Commissioner		Encourage rules development. Consumers must be able to trust that their data is not being used for purposes they have not permitted. Privacy Commissioner letter Important not to underestimate significance of networks being able to make use of AMI data for network operation and pricing determination	Agree; no need to regulate, as other mechanisms such as Privacy Act Network agreements also need to be clear re use of data for network management	Consumers should have rights to retailer's data (eg, daily usage) Where meter capable of recording additional data (eg pressure, temp), meter owner should have right to charge for providing it. Need to establish meter data security requirements	Yes, consumers own data	Yes; retailer is guardian, but data belong to consumer	Expect gas AMI customers to be able to access their information as electricity consumers can
14. Registry-related issues that still need to be addressed to support the deployment of advanced gas meters?	Need an industry working group to investigate metering options, capabilities and limitations so registry can support advanced metering. Issue to address: • Able to identify smart-capable metering • Whether metering is in communication • Capability of meter		All data needed to ID AMI already on registry Useful field might be recording interval Amend advanced meter definition to include ability to collect data remotely – so meter in a cellular black spot would not be considered AMI	May be pragmatic to review meter fields: • to ensure appropriate for all technology types • to remove or make optional any data that does not provide benefit (eg, is both resp meter owner and adv meter owner required?)	No	No. Registry changes expensive; need CBA that references what improvements to process the changes would bring	no	Add code to distinguish legacy and advanced meters Existing ToU definition needs to indicate whether meter corrects for temp & pressure Add code to signal whether communications exist (and are working)

Question	Contact	First Gas	Genesis	Metrix	Nova	Powerco	Trustpower	Vector
15. Any other comments?	Amend NZS5259 to cater for additional functionality of AMI Include WorkSafe in developing procedures regarding remote disconnection/ reconnection			Ensuring there is an active competitive market for field service providers is essential For mass deployment or replacement, economic unfairness in having to replace perfectly good ancillary equipment, such as house bracket, cover, and associated pipework. Could lead to consumer pushback (to remove and replace wall bracket) and higher installation costs Majority of European meters have 6-8m3 per hour capacity rather than 10m3/hr preferred in NZ – poses limitation	AMI likely to remain expensive because of installation process, so important customer gets to choose whether or not to have AMI and pay the costs Technology for AMI is still developing; keep watching brief, but premature to try to force particular outcomes at this stage	No	No	Consistent signalling from regulators will provide greater certainty
16. Any issues in relation to gas metering-related complaints?	None.		Expect complaints re meter reading to decrease with AMI, though other issues may arise (eg. With communications devices)	s	No	Small number of complaints; AMI to all is disproportionate response to address issues	no	Complaints not about meter itself

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.

Gas Industry Co's corporate strategy is to 'optimise the contribution of gas to New Zealand'.