

# Review of the regulatory framework for metering services

## DIRECTIONS PAPER – STAKEHOLDER FEEDBACK TEMPLATE

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in the Directions paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the Directions paper.

#### **SUBMITTER DETAILS**

ORGANISATION:	Secure Meters (Australia) Pty Ltd	
CONTACT NAME:	E: Nitesh Khanna (Region Head, Australia & NZ)	
EMAIL:	Nitesh.Khanna@securemeters.com	
PHONE:	0478882285	
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#### **PROJECT DETAILS**

NAME OF REVIEW: Review of the regulatory framework for metering services

PROJECT CODE: EM00040

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### **CHAPTER 2** – QUESTION 1: BENEFITS WHICH CAN BE ENABLED BY SMART METERS

 a. Are there other benefits which can be enabled by smart meters that are important to include in developing policy under the Review? Smart Meters have the potential of providing benefits across the energy value chain all the way from electricity generation to the customer (end-consumer). Smart Meters enable three key aspects for the industry:

**<u>Enabling Control:</u>** Ability to control, monitor and modulate electricity supply.

<u>**Data Delivery:**</u> Ability to capture and report consumption and power quality data which allows for accurate billing, timely market settlement and improved customer service.

**New Services:** Ability to offer a choice of value-added services to distributors, retailers, and customers. These could include services such as:

- Quality-of-Service data to help distributors and other stakeholders understand the distribution network health
- Load control, allowing smart-meters to remotely control the electricity supply at the meter, thereby strengthening DER options
- In addition to the standard schedule based bill payment, providing an ability for choice of budgeting & payment options, such as Pay-As-You-Consume (PAYC) which in-turn allows customers to better manage their energy costs
- Alerting service for customers where they get notifications in case electricity supply is disrupted (planned or unplanned)
- Ability to monitor and report PV and EV information from the customer's premise

The benefits that can be achieved through appropriate solutions built upon smart-meter technology have the potential of really enhancing the customer's experience around energy use.

While a directional change is needed to improve the penetration of smart-meters within the power-of-choice market, the changes need to weigh against the costs it would add to the existing systems.

We strongly believe that any direction taken by the regulators should constantly assess the benefits that will be realised by the various stakeholders, but with a special focus on the benefits realised by the customer (end-consumer).

 b. What are stakeholders views on alternative devices enabling benefits? What are the pros and cons of these alternative devices? Secure agrees with commission's assessment that alternative devices could potentially be used in conjunction with smart meters to enable greater benefits for the customers. However, smart meters are potentially better placed to provide improved data and services at scale. For example, this is certainly the case with power quality data as the smart meters have an inherent ability to measure, collate and when required send this data.

The other aspect to consider when including alternate devices, is the how and where these devices are expected to be installed. Multiple devices at customer's premises could potentially be constrained by the switchboard limitations.

**CHAPTER 2** – QUESTION 2: PENETRATION OF SMART METERS REQUIRED TO REALISE BENEFITS

a. Do stakeholders agree that a higher penetration of smart meters is likely required to more fully realise the benefits of smart meters? If so, why? If no, why not?

Yes, we agree that higher penetration of smart meters is required to realise full benefits of the smart meters.

Higher penetration will enable innovative retail models, value added services, improved efficiencies, and greater customer experience.

It would also allow the electricity markets to get a more holistic view of the nightly consumption data as compared to the current penetration levels within the power-of-choice jurisdictions in Australia.

b. Do stakeholders have any feedback on the level of smart meter penetration required for specific benefits? Or to optimise all benefits?

With the constant evolution of technology and business models, it is difficult to ascertain level of smart meter penetration for specific benefits. In general, higher penetration will lead to greater benefits.

On the other hand, it is important to understand that there are benefits that can be realised along the way. Hence, as the penetration improves, so will the level of benefits and the type of services that can be offered.

### **CHAPTER 3** – QUESTION 3: TO REACH A CRITICAL MASS IN A TIMELY MANNER, OPTIONS TO ACCELERATE THE ROLL OUT SHOULD BE CONSIDERED

a. Do you consider that the roll accelerated? Please provide details of why or why not?

As the commission has identified that a higher penetration of out of smart meters should be smart meters is required to fully realise the benefits of smart meters, it is essential that the roll out happens at a considerable pace to help reach those targets sooner. The higher the scale of the rollout, the higher the efficiencies and services that can be passed onto the customers.

> As a part of this review process, the commission may elect to re-assess any jurisdictional restrictions that affect the pace of the smart meter rollout. Until bottlenecks are reduced and/or removed, smart meter roll out will be perceived as a cost to customers and the industry thereby limiting the realisation of benefits.

> An increase in penetration will drive down the unit cost for installation and data as retailers benefit for volume discounts.

b. What are the merits, costs and benefits of each option? Is there a particular option which would be most appropriate in providing a timely, cost effective, safe and equitable roll out of smart meters?

At a minimum, we believe the responsible parties should be assigned targets for the rollout per year with a backstop date by which a certain percentage of meters in the NEM will need to be converted to smart meters. That is essentially a combination of options 3 and 4 in the discussion paper.

Further speed can be attained by immediately accelerating the rollout by pursuing options 3 and 4 and overtime taking a planned approach to include the approach of replacing meters that have reached certain age (option 2).

We believe, while Option 1 can provide efficiencies and Option 2 is guite valid too, both would lead to a very slow rollout if taken up in isolation. Both these options can work towards assisting the rollout but as the key driving mechanisms.

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C.	How would each of these options for rolling out smart meters impact the cost profiles of smart meters?	To accurately address this question would require certain level of modelling, however, by the very nature of options 3 and 4, these will inherently derive efficiencies in the field as the rollout can follow a similar pattern that distributor(s) followed in Victoria, that is, focussing on a complete suburb/local area at time.
d.	Are there other options that you consider would better provide a timely, cost effective, safe and equitable roll out of smart meters?	We believe while retailers remain accountable for metering within the POC, stakeholders such as, but not limited to, distributors could be one of the responsible parties to help towards bulk roll out smart meters, especially in the areas where a significant network benefit can be derived.

### **CHAPTER 3** – QUESTION 4: OPTIONS TO ASSIST IN ALIGNING INCENTIVES

a. Do stakeholders agree that a higher penetration of smart meters is likely required to more fully realise the benefits of smart meters? If so, why? If no, why not?

#### <updated question from directions paper> (a)What are the costs and benefits of each option? Is there a particular option which would best align incentives for stakeholders?

Option 1: Requires a certain level of penetration to work. it will be ideal if data access could help open future revenue stream. Costs are difficult to determine at this stage as industry will need to establish willingness of benefitting parties to pay for data access. However, as a benefit, it can potentially open additional revenue stream for the industry participants and potentially lower cost of energy for the customers. Alternatively, customers can be considered as the custodians of data, and service model established where they are the direct recipients of the commercial value generated from the data.

Option 2: While this option has the potential to attribute costs of installation, it requires a further in-depth assessment and is likely best assessed by the responsible parties for installation.

Option 3: We believe multiple parties can engage MC's and become responsible for metering and if executed correctly this has the potential to further open the market to new participants and increase competition. On the other hand, AEMC and other regulatory bodies will need to consider the complexities it adds to the installation, and after-installation services (maintenance, manual-reads (MRAM customers), daily data delivery service contract etc). Post installation, the assumption is that accountability will remain with the Retailer.

b. Do stakeholders have any feedback on the level of smart meter penetration required for specific benefits? Or to optimise all benefits?

## <upd><updated question from directions paper>

(b)Are there other options that you consider would better align incentives?

The commission could potentially consider getting regulators and/or government bodies involved in offering favourable settlement terms to retailers for their smart meter fleet for installation and management.

The regulator should also consider options where retailers are incentivised to explore additional/innovative services and if/where necessary allow for recovering of such costs.

**CHAPTER 3** – QUESTION 5: THE CURRENT MINIMUM SERVICE SPECIFICATIONS ENABLE THE REQUIRED SERVICES TO BE PROVIDED

a.	Do you agree with the
	Commission's preliminary
	position that the minimum
	service specification and
	physical requirements of the
	meter are sufficient? If not,
	what are the specific changes
	required?

While the meters today deliver the minimum viable product that can meet the current specifications, the commission could potentially consider aligning the minimum specs in POC with VIC AMI rollout. This would enable technologies such as home area networks and last gasp features that could potentially be optional but enable additional services to be provided to customers.

 Are there changes to the minimum service specifications, or elsewhere in Chapter 7 of the NER, required to enable new services and innovation? The goal of minimum service specifications is to drive consistency and predictability within the market. While the minimum specifications allow market participants to meet the regulatory requirements, they still allow the ability to offer differentiated and/or discretionary services to the customers.

A direction on whether to alter minimum specifications should only be taken considering the altered/additional minimum services being planned to be provided to customers. The cost of incorporating these changes without a clearly outlined customer benefit may be counter productive for the industry.

c. What is the most costeffective way to support
electrical safety outcomes, like
neutral integrity? Would
enabling data access for
DNSPs or requiring smart
meters to physically provide
the service, such as via an
alarm within the meter,
achieve this?

Events such as over voltage, over current and cover removal events etc could be provided via alarms to the DNSP. Again, using an agreed data flow would be the most effective delivery mechanism.

d. Do you agree smart meters provide the most efficient means for DNSPs to improve the visibility of their low voltage networks? Why, or why not? What would alternatives for network monitoring be, and would any of these alternatives be more efficient? Yes, with the enablement of additional data streams such as power quality (PQ) data and a standardised mechanism for provisioning of these data streams. This information can be further strengthened through a smart-digital layer that can help in decision making based on collated PQ data.

By default, POC meters are measuring voltage and current to calculate energy parameters and can send this data daily. It would be prudent to leverage what is already available for use by the DNSP.

e. Can smart meters be used to provide an effective solution to emerging system issues?

Yes, smart meters can play an important role in ensuring electrical system stability by provisioning of data and control features.

A successful system stability trial was conducted by AEMO in early 2021 in South Australia to demonstrate how smart meters can be used to curtail non-essential load to bring the grid back in supply/demand balance.

### **CHAPTER 3** – QUESTION 6: ENABLING APPROPRIATE ACCESS TO DATA FROM METERS IS KEY TO UNLOCKING BENEFITS FOR CONSUMERS AND END USERS

a. Do you agree there is a need to develop a framework for power quality data access and exchange? Why or why not? Yes. Although it is largely dependent on the consumer of that data stream and what services need to be enabled using PQ data. From a DNSP's perspective a common framework will simplify data processing regardless of meter type, HES and delivery method, though this will bring in additional platform requirements for the data providers.

b. Besides DNSPs, which other market participants or third parties may reasonably require access to power quality data under an exchange framework? What are the use cases and benefits that access to this data can offer? Third party providers engaging in providing ancillary services in the NEM may be interested in obtaining PQ data from the meters. Commercial and Industrial customers with assets sensitive to variations in PQ could benefit from this data. Customers undertaking power factor correction would also benefit from granular data.

c. Do you have any views on whether the provision of power quality data should be standardised? If so, what should the Commission take into consideration? A hybrid approach is recommended for standardising PQ data. Data that are common and can be obtained and provisioned easily can be standardised. However, for more niche data streams and more frequent data, parties may engage in commercial negotiations with the relevant market provider for access to that data.

d. Do you consider the current framework is meeting consumers' demand for energy data (billing and nonbilling data), and if not, what changes would be required? Is there data that consumers would benefit from accessing that CDR will not enable?

Customer's access to their consumption or solar data will surely help improve their decision-making ability around optimising self-consumption and use of their PV assets at the residence. Information such as consumption alerts, information from their retailer and where suitable, information via in-home-displays can improve the customer experience while staying within the CDR framework.

### **CHAPTER 3** – QUESTION 7: FEEDBACK ON THE INITIAL OPTIONS FOR DATA ACCESS THAT THE COMMISSION HAS PRESENTED

 a. What are the costs and benefits of a centralised organisation providing all metering data? Is there value in exploring this option further? (e.g., high prescription of data management).

AEMO's B2B e-Hub already acts as the collation market layer for all metering data delivered by MDPs in a standardised format (NEM12). We believe this will add to the overall cost of providing data without much added benefit and may overlap with the role of MDP in the market.

Furthermore, the recent approach taken by UK, towards a centralised control and data solution, has been perceived by some of the market participants in UK to have increased the complexity and likely cost of managing the meter.

We believe, as the POC structure is already in place, by driving further efficiencies throughout the POC market should both streamline the existing model and provide benefits to participants without the need of a separate/new centralised model.

 What are the costs and benefits of minimum content requirements for contracts and agreements for data access to provide standardisation? Would such an approach address issues of negotiation, consistency, and price of data? We believe, the current model is structured on a minimum data model where the core content (customer's consumption data) is provided to Retailers for billing. The market can create discretionary offerings based on the data, while maintaining a view that discretionary offering has a direct or in-direct benefit for the customer.

We agree with the statement in the directions paper (reference page no. 72), that delivery of data streams (as per minimum contents requirements) will involve various systems and data transmission costs, and if the data stream is expected to be provided at free/low charges, it could lead to losses for the responsible parties for delivery of the data.

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c.	What are the costs and
	benefits of developing an
	exchange architecture to
	minimise one-to-many
	interfaces and negotiations?
	Could B2B be utilised to serve
	this function? Is there value in
	exploring a new architecture
	such as an API-based hub and
	spoke model?

It is difficult to determine the costs and likely benefits without a final architecture in place. The trade-off between a common exchange architecture and the costs of achieving such an outcome needs to be discussed across the industry. As a market participant we are keen to engage in ongoing discussions towards formulating a cost-benefit analysis for this requirement.

d. What are the costs and benefits of a negotiatearbitrate structure to enable data access for metering? Is there value in exploring this option further? (e.g. coverage tests or non-prescriptive pricing principles).

We agree with the end-statement provided in the direction paper (reference page 73), that is - "In this way, negotiatearbitrate might not solve the issues of the current arrangements on its own"

The key to efficiency with the market is to simplify and define a clear process for resolving disputes on data. This should help reduce time to resolution.

e. Are there any other specific options or components the Commission should consider?

### **CHAPTER 3** – QUESTION 8: A HIGHER PENETRATION OF SMART METERS WILL

a. Are there other potential use cases that third parties can offer at different penetrations of smart meters? What else is required to enable these use cases?

ENABLE MORE SERVICES TO BE PROVIDED MORE EFFICIENTLY

While the directions paper already identifies the ability for a smart-meter to provide power-quality-data, there are various other use-cases that a smart-meter can help deliver. The below list provides an overview of some of such services:

- a. Power Quality data (already covered by the directions paper)
- b. Remote load control & management helping strengthen
- c. Budget management for customers by providing standard schedule-based bill payment & Pay-As-You-Consume (PAYC) from the same smart-meter
- d. The smart meter can send an alert/notification to the customer in the event supply disruption thereby both benefiting the customer and improving customer experience.
- e. Ability to monitor and report PV and EV information from the end-consumer's premise
- f. Ability for a customer to connect and in-home device directly to the meter to understand their instantaneous consumptions and make informed decisions
- g. Ability for the customer to engage in market opt-in load shedding scenarios
- b. Noting recommendations in there other considerations for

The commission should assess a hybrid model for the smartincentives and the roll out, are meter rollout where some of the cost incentive trade-offs are economies of scale in current and emerging service models?

supported through public funding and others can be achieved through a competitive market.

#### **CHAPTER 3** – QUESTION 9: IMPROVING CUSTOMERS' EXPERIENCE

a. Do you have any feedback on the proposal to require retailers to provide information to their customers when a smart meter is being installed? Is the proposed information adequate, or should any changes be made? Yes, we agree that a more informed customer is always a better outcome. The customer would benefit from understanding the improvements that a smart meter would bring to their premise.

As the penetration of smart meters improve across the POC, the Retailer may choose to provide information about the available discretionary services upfront to their customers, thereby allowing the customers to realise the value even faster.

b. Should an independent party provide information on smart meters for customers? If so, how should this be implemented?

It is important that the customer is well informed. To allow for timely and accurate dissemination of information to the customer, this could be a simple service-provider model established to assist retailers in providing this information to customers, or, as suggested by the commission, this may be established as an independent party directly communicating with the customer. It is important to finalise a model which is simple to ensure correct information is provided to the specific customer.

c. Should retailers be required to install a smart meter when requested by a customer, for any reason? Are there any unintended consequences which may arise from such an approach?

Yes. The core basis of the 'Power of Choice' market is – Choice. Hence, the choice should sit with the customer to request a smart meter for any reason. The commercial model for such a request is best expanded by retailers, but as long as the request can be reasonably met, the customer should be provided the option to request a smart meter for any reason.

#### **CHAPTER 3** – QUESTION 10: REDUCING DELAYS IN METER REPLACEMENT

6	a. Do you have any feedback on the proposed changes to the meter malfunction process?	
b. Are there any practicable mechanisms to address remediation issues that can prevent a smart meter from being installed?		

### **CHAPTER 3** – QUESTION 11: MEASURES THAT COULD SUPPORT MORE EFFICIENT DEPLOYMENT OF SMART METERS

a.	Do you have any feedback on the proposal to reduce the number of notices for retailer- led roll outs to one?	
b.	What are your views on the opt-out provision for retailer-led roll outs? Should the opt-	We believe that customers are a key stakeholder in formulating the outcome of this question.

out provision be removed or retained, and why?

If the commission moved towards removing the opt-out option, then it is important to provide a support mechanism for the customer to take up the smart-meter install. The support could come from an agreed funding mechanism or a benefits realisation model.

On the other hand, if the commission decides to keep in the opt-out options, thereby allowing choice to the customer, further incentives could be offered to customers with / without smart-meters through the mechanism of favourable tariffs for smart-meter customers. Having favourable smart-meter tariffs may encourage customers to consider installing a smart-meter.

c. Are there solutions which you consider will help to simplify and improve meter replacement in multioccupancy premises? Should a one-in-all-in approach be considered further? Multi-occupancy replacements should be approached with consideration of two aspects:

- As best possible minimise impact on customer
- Consider all technology options that can help minimise the cost of the replacements. Reduced costs would support the one-in-all-in approach

Cost-effective and technology centric options for resolving multi-occupancy sites should be discussed with meter product vendors.

Furthermore, to address the specific question raised by the commission, namely – Are there other solutions that can help simplify and improve multi-occupancy premises, we believe there are technology options that can be considered. For example, Secure launched a completely wireless connected solution for multi-occupancy sites to help simplify the wiring requirements and to reduce the effort/cost of meter replacements. In the market, there surely are other solutions that too can be considered towards simplification of this area.

### CHAPTER 3 – QUESTION 12: FEEDBACK ON OTHER INSTALLATION ISSUE

 a. Do you have feedback on any of the other installation issues raised by stakeholders? Are there any other installation issues the Commission should also consider?

### **CHAPTER 3** – QUESTION 13: IMPROVEMENTS TO ROLES AND RESPONSIBILITIES

 a. Are there any changes to roles and responsibilities that the Commission should consider under this review? If so, what are those changes, and what would be the benefit of those changes

While we agree with quite a few comments already included in the directions paper and agree that a simplification of roles and responsibilities will assist the market, we believe changing existing roles and responsibilities is not a simple task. Each option already referred to in the directions paper has its own pros and cons. Furthermore, the current market participants have already invested a considerable effort to allow processes with POC to be supported.

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The most optimal approach for the commission is to consider the outcomes for this area post detailed industry sessions as part of reference sub-group 4.

Each approach should keep the customer as its focal point and balance the change of roles and responsibilities to achieve -i) lower costs for customers; ii) improved customer experience; and iii) holistic benefits across the energy industry.

### **OTHER COMMENTS**