

# REVIEW OF THE REGULATORY FRAMEWORK FOR METERING SERVICES

## STAKEHOLDER FEEDBACK TEMPLATE

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in the consultation 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 consultation paper.

#### **SUBMITTER DETAILS**

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DATE	11 February 2021	

#### **PROJECT DETAILS**

NAME OF RULE CHANGE:	Review of the regulatory framework for metering services
PROJECT CODE:	EMO0040
PROPONENT:	AEMC
SUBMISSION DUE 11 February 2021 DATE:	

#### **CHAPTER 1** – INTRODUCTION

Consideration of other market reforms and related work	
1.1 Are there other significant market reforms that are likely to impact the metering framework that the	Yes, the proposed reforms to the regulatory framework for embedded networks could be considered as it will impact the implementation of metering framework for embedded network customers.

Commission has not identified?	The other market reform which will impact smart-meters framework is related to DER services, especially related to control of behind-the-meter devices such as solar. A case in example is Southern Australia which has adopted changes to the way smart-meters need to be installed and likely used in a DER scenario.
21.2. Is there additional related work that the Commission should consider in this metering review?	The commission should consider the market contestability and barriers to entry for new market participants.  Barriers to entry for meter and meter-data integration across market participants e.g. Metering Providers and Metering Coordinators.  Furthermore, the Commission can assess the opportunity of structuring the framework to easily allow introduction of value-added-services by either of MC/MP/MDP/Vendor that leverage the technology of smart-meters and provide benefits to end-customers and retailers. Services & products such as in-home-displays, live updates to end-customers, loss of supply monitoring, DER management, remote-management can be enabled via the smart-meter.
2. <b>Assessment framework</b> – Do you agree with the Commission's proposed Assessment Framework for this review? Are there any additional criteria we should consider as a part of this framework?	Yes, we agree with the commission's proposed assessment framework. In regards to the additional criteria, the commission could include:  1. Changes to contestability model in the market with a focus on cost/benefit to the end customer  2. Provisioning of new services across the metering solutions and/or services that provide benefits across the value chain, including the network and customers

### **CHAPTER 3** – THE CURRENT STATE OF METERING

3.	Expectations of meter rollout	
	3.1 How does the roll out of smart meters to date compare with your expectations?	The retailer-led smart meter rollout is deemed to be slower than expected and could potentially lead to a fragmented customer benefit.
		The commencement of the 5-minute settlement (5MS) and Global Settlement (GS) programs is based on a reasonable coverage of the smart meters in the NEM. Based on the current rate of roll out, it is expected that the immediate benefit of 5MS and GS will be limited until a reasonable penetration of smart meters is reached in the NEM.
		Further to this, customer's reluctance to renew their electrical wiring (where required) at their own cost, as part of metering installation may also lessen their desire to take up smart meter installation.
		Reforms that allow faster rollout of smart-meters enabling services that benefit for the customer will help unleash the untapped value of the smart-metering technology.
	3.2 Is the current pace of smart meter deployment appropriate? What should be the appropriate pace of rollout?	Although the commission has expressed that it had not set expectation on the rate of smart meter roll out, we suggest that as a part of this review the commission could benchmark the current rate of rollout and also the smart meter rollout in the international markets, most notably UK.

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4.	Are incentives in the right place?	
	3.4 have the prices for smart meters plus the costs of associated products and services changed from the introduction of <i>Competition in metering?</i> If so, how?	No comment.
		Technology within the smart meters exists to allow customers to choose their mode of payment. The meters can be used to offer new and innovative payment options to customers allowing them to be budget smart and proactively control their budgets including options such as customised tariffs and payas-you-consume which enables the customers to pay in smaller lots.
		Despite the above benefits having matured over time, the customer's and the market's expectations of future services will continue to grow. Therefore, the framework needs to allow for continued innovation in new products and services being made available to the customer which in-turn will increase the rate of future smart meter roll outs.
		<ul> <li>Allow electricity distributors to detect outages more quickly and monitor the quality of customer electricity supply. This helps minimise the number and length of electricity supply outages.</li> </ul>
		<ul> <li>Help electricity retailers offer customer better and more innovative products and services, like energy management apps and access to information about customer use of electricity.</li> </ul>
		<ul> <li>Providing customers access to their detailed energy usage information on a regular basis. This information can help customers understand and adjust their usage behaviour and also help customers find the most appropriate energy plan based on their load profile.</li> </ul>
	Have the benefits changes or improved over time?	<ul> <li>Providing customers access to a wider range of services, including rooftop solar and battery storage and the ability to optimise energy usage at the site with the availability of more granular data.</li> </ul>
	3.3 What benefits are smart meters providing consumers?	There are a number of benefits to customers which have clearly been identified under the regulatory instruments. Such as:
		place with Metering Providers allow for a much faster pace of deployment.  AEMC should assess the option of establishing strong targets for smart meter rollouts within the NEM.
		slower than expected. The current pace, at times, may restrict economies of scale to kick in, and in essence limit the level of innovation that can be achieved.  The smart metering technology, along with the processes in
		The current pace of smart meter deployment is deemed to be

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4.1 Are the incentives in
relation to smart meter
rollout correct? Please
provide details on why/why
not.

Some of the incentives communicated by the industry are correct for smart meter roll out e.g. more granular and access for customer's to their energy data.

Some of the incentives of the smart meter roll out for customer can only be achieved with the introduction of a wide variety of pricing arrangements such as Demand based and Time of Use pricing, seasonal pricing, etc. to help lower the cost of energy for customers

These pricing arrangements also provide an opportunity to tackle the issue of rising peak demand.

In addition, the incentives such as pay as you consume (PAYC) have not yet been fully accepted by the industry and hence not been made available to the customer.

It is obvious that, most consumers remain unsure about the implementation of new tariff arrangements, and the choices available to them in regards to the tariff arrangements and new products and services such as PAYC.

We also believe that the ineffective communication to the customers in regards to the benefit of the smart meters may also have contributed to the slow uptake of smart meters.

## 4.2 Is the current market structure financially viable? If not, for whom is it not financially viable?

The intent of power-of-choice (PoC) reform was to bring in competitiveness into the market. The smart meter & services model is viable through economies of scale. The viability within the market is directly proportional to the rate of smart meter rollout. Hence to improve viability, the rate of rollout needs to improve.

## 5. Drivers of smart meter roll out

## 5.1 What were your expectations regarding the drivers of smart meter rollouts?

The smart-meter rollout was predicated on the following key expectations:

- 1. Reduction in customer bills combined with reliable supply
- 2. Customers having access to more affordable & personalised products and services
- 3. Help in reducing bill-shock & unknowns
- 4. Help customers in managing their budgets by being better informed about their electricity consumption

## 5.2 Has there been any changes in the overall reasons for installing smart meters since the *Competition in metering* rule commenced?

The current rate of meter churn to smart meters is largely driven by the number of the roof top solar being installed in the market, new building activity and replacements. As customers continue to install solar panels and continue accessing battery storage roll out program, we may see stability in the smart meter roll out in the market.

Beyond this there are not many services created for customers to opt for a smart meter. Energy retailers understand and appreciate the benefits of smart meters but are limited by the ability to proactively roll out smart meters due to low incentives available for such a rollout.

5.3 Which parties should be responsible for driving the roll out of smart meters?  We believe that the current retailer led smart meter rounded provides customers better choices in relation to smart meters? smart meters however there is a scope of greater participation of LNSP's into the program. Smart meters, the data provides that the current retailer led smart meter rounded provides customers better choices in relation to smart meters, the data provides that the current retailer led smart meter rounded provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters, the data provides customers better choices in relation to smart meters.	the ation vided
beneficial for the complete electricity value chain.	15
5.4 Do consumers have clear information on the benefits of smart meters and their rights relating to requesting a smart meter?  We believe there is a scope of improving the communicative the customers in relation to the information on the benefit smart meters. Government and Industry should take an a role in promoting the benefits of smart meters to custom Further incentives that empower the customer to proact adopt smart meter technology can provide upstream ber for the market participants.	its of ctive ners. rively
6. <b>Customer experience</b> – what are your views on the customer experience in relation to smart meter rollout and installation?  Due to lack of availability of expected services, custo believe that smart meters have not really being adding value them. Rather they believe they are paying more than been the smart metering rollout.  Customer incentives are key to driving a higher adoption smart meters across all customer segments.	ue to efore
7. Industry Cooperation	
7.1 Do you have any suggestions on how industry cooperation can be improved?  The successful delivery of smart metering benefits dep upon coordinated effort from a wide range of organisat AEMO, AER, DNSPs, FRMPs and MCs.  AEMO did have industry forums in the past that considered very informative and a good meeting point were industry discussed and mutually agreed on implementation new projects, shared learnings and discuss issues and solu etc.	were the on of
Continuation of such industry forums is highly likely to fu improve the cooperation within the industry.	rther
7.2 Are changes to the market structure or roles and responsibilities needed to improve the consumer experience?  Yes, as discussed previously a more active role for LNSI required to ensure customer's smooth transition to smetering. For example, the reforms could consider the coupgrades required at some customer's premises to be smearcoss the whole market and collected via network character than the customer being financially responsible metering upgrade at their premises. At times the upgrinvolve electrical work beyond just installing the smart mwhich makes the work prohibitive for the customer, but enabling cost-sharing of such scenarios, the overall market reap the benefits of smart meter rollout.	mart est of eared arges e for ades eter, at by
8. Expectations of metering services	
8.1 What expectations did you have around the services that smart meters would provide?  The commission's policy intention statement captures moths the key services that will be enabled by smart meters. The have been a number of trials supported by ARENA to use smeter data and provide VPP, DM and DER services. These and services will need to be productised with innov business models that articulate how customers can particulate and the benefits they derive from their participation.	here mart trials ative

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	In addition to this, smart meters can play an active role in network demand management by providing more frequent and more granular data upstream to the networks that should aim at using this data for deferring network augmentation where possible.  The smart metering can help in improving better utilisation of network assets thus deferring investments required. Smart Meters can also enable Pay As You Consume (PAYC) services for better budget control.
8.2 What services are being provided by smart meters currently? Are these services widely available?	1. Smart meters are currently perceived by the customers as potentially a device that gives them better data on their usage profile and consumption behaviour.  Retailers and market participants have started using smart meter data to provide other services in addition to the ones that have already been captured by the commission's policy intent. These services include orchestration services for solar and battery customers, energy sharing, VPP, DM, Opt-in load management, remote energisation/de-energisation etc.  2. No, not all the services are yet available in the market. Some of these services are in the early stages of market trials and not yet widely available to all smart meter customers
8.3 What services dd you expect from smart meters which have not eventuated?	We expected wider usage of smart meters for network management and creation of demand based and TOU tariffs to discourage energy usage at peak times. In addition, smart meters can also be used to provide last gasp notifications for better customer experience and network management. Last gasp can proactively inform the retailer, network, and customer of supply challenges.  The creation of these services has been slower than expected in our view.
8.4 Are there any services being provided by smart meters which were not anticipated at the time of the <i>Competition in metering</i> rule change?	Market services such as FCAS and voltage management are being enabled by smart meters and battery storage roll out that we believe were not anticipated at this level at the time of the Competition in metering rule change.

### **CHAPTER 4** – THE FUTURE STATE OF METERING

9. Collection and use of metering data	
9.1 In relation to metering data, what data should be captured by smart meters, and why?	Smart Meters, at the very basic level, capture all instantaneous parameters, billing parameters, consumption history, tamper events, telco signal strength and this data could be of interest to various market participants. For example: DNSP's and/or retailers can utilise diagnostic data to track any supply issues proactively. Similarly, more granular and high frequency data may be of interest to entities providing market services such as Demand Response and FCAS.  Unfortunately, a lot of the technology & data features available
	within the smart meters is not being used in the current

	environment. Most of the data being captured is centred around consumption data used for billing by the Retailer. While this is the minimum data required to meet billing requirements, the holistic value delivered by smart-meters can be amplified across the energy value chain (generation to consumption to billing) through use of all the features available within the meters.
9.2 In relation to metering data, who should be able to access metering data, and how? What protections should	In relation to the metering data, currently Customers, Retailers, DNSP's & relevant market participants are able to access consumption and some diagnostic data in relation to metering points within the NEM.
be in place?	Areas where processes and/or access controls can be further enhanced are:
	<ol> <li>Customers can also opt in to participate in VPP and market services provided by unregulated entities and if needed can authorise to share data with such entities.</li> </ol>
	<ol> <li>The current provisioning that the energy data should stay in Australia provides a level of security to unauthorised use of data. The operational tasks versus data access segregation may provide a more cost-effective operational model.</li> </ol>
	<ol> <li>In addition, consideration should be given to standardised processes across the industry that allows methods to easily collect customer's approval to share customer approved data with multiple entities.</li> </ol>
	<ol> <li>In addition, a registration process must be standardised for all entities (including unregulated entities), if they were to receive and use customer's energy data for commercial use.</li> </ol>
9.3 What impact do you think the Consumer Data Rights may have on the access to, and use of, metering data?	Metering data, as per regulatory requirements, is already secure and only available to designated entities. CDR will both enable new service models by providing customers value for their data, but will also add complexity in the storage, access and authorisation for the use of the data by Retailers.
10. Future metering services	
10.1 What is your understanding of the other	Smart meters typically are designed to enable a wide set of services. Some of these services are:
services that smart meters	- Demand Management
can provide?	- DER Management
	<ul> <li>Remote energy management (both scheduled and on- demand services)</li> </ul>
	<ul> <li>Pay as you consume (PAYC) metering, which can help improve customer's understanding of tariffs and provide an opportunity to budget their consumption</li> </ul>
	<ul> <li>Control mechanisms for behind the meter devices (for example, solar inverters)</li> </ul>
	<ul> <li>Monitoring supply into a premise, including immediate visibility of loss-of-supply events</li> </ul>
	- Residence level diagnostic information
	- Smart Devices (In-home displays)

10.2 What future services do you expect or want metering to facilitate?	Establishment of a common regulatory framework for multi – utility metering with an aim to establish a synergy with the concept of merging the meter reading functions of different utilities into one single service and provisioning of common benefits for customers.
10.3 If additional services are to be provided by smart meters, how should the costs of providing these services be allocated?	The services are centric to retailing & customers. Hence allocation likely to be done towards Retailers.
11. Penetration of smart meters required	
11.1 Are particular metering services only cost effective when a particular penetration is achieved? If so, what services and what penetration is required?	To allow multiple cost-effective services to be enabled through smart meters, a penetration of minimum 60% and above will allow both the services and the data generated from the smart meters to play a significant part in delivering value to customers.  Even at lower penetration levels (for example, the current levels of approx. 18-20% in the NEM outside of VICTORIA), smart meters are already delivering value to Retailers. These benefits will improve multi-fold with increasing penetration.  As mentioned in 10.1, various services can be enabled for a wide set of customers with an improved penetration of smart meters.
11.2 What other factors are important in determining whether the provision of particular services are efficient or effective (e.g. geographic spread).	Non-churning customers and increasing consumer base, which can be measured Retailer wise, is an important factor to determine whether provision of particular services are efficient or effective.  For the customer, the services can lead to improved incentives, lower costs and easy management of their electricity budgets.

## **CHAPTER 5** – ARE CHANGES REQUIRED TO THE REGULATORY FRAMEWORK?

12. Encouraging the adoption of smart meters and future services	
12.1 Is the current regulatory framework appropriate for the current needs of metering and the market? Is it flexible enough to provide encouragement for the development of future services in metering?	No, the current rules do not provide enough clarity on use of services beyond the collection of consumption data.  For example, the use of smart meters for DER, for Pay-as-You-Consume are not clear. The regulatory framework also does not provide clarity on whether the Retailer/MC/MP/MDP can have direct integration to enable end-to-end services.  Improved flexibility in the framework, along with the ability to create integrated solutions will allow a lot higher value-added-services to be created and delivered from the Retailers to the customers via the use of smart meters.
<ul><li>12.2 To encourage the higher adoption of smart meters:</li><li>(a) What changes, if any, need to be made to the current regulatory framework</li></ul>	The current regulatory framework is quite detailed as it focuses on customer protection and a strong governance across the value chain.  The framework surely can be enhanced & reviewed to allow for improvements that benefit all the participants, especially where

for metering services?  (b) What changes, if any, need to be made to other instruments? (e.g. regulatory instruments, guidelines, codes)  12.3 Are there any other avenues of encouragement that are available that the	the changes would allow higher benefits to customers, lower the current cost to serve and streamline the governance. Given the complexity and inter-dependency of regulatory requirements, none of the changes can or should be suggested in isolation.  In our view, if the Commission is considering enhancements to the framework, the appropriate forum to discuss any such enhancements would be within the reference groups which include a cross-section of the market participants. This will allow for a holistic discussion around this topic.  The Commission may consider the introduction of different payment options, such as PAYC as it reduces the burden on the Retailer, reduces overall billing requirements, incentivises the customer and allows budget controls by the customer thereby
Commission has not considered in this paper?  13. Barriers to realising the benefits of smart meters	delivering benefits across the value chain.
13.1 Are there other barriers that were not identified by the Commission that you have found to prevent the realisation of benefits of smart meters and/or slowed the rollout of smart meters in the NEM?	The cause of slow take up rates are mainly contributed by the factors like:  • Lack of end customer engagement and involvement into their energy use.  • The possibility of customer installation wiring defects and customer facing disconnection as the result.  • the expectation that smart meters may not actually save customers money.  Whether real or perceived, each of these factors constitute an additional cost from customer's perspective and they should be adequately considered when considering the causes of low take-up rates.  Furthermore, the barriers to entry for introduction of new services for end customers, both process and commercial, need to be identified and addressed to help towards a faster benefit realisation of smart-meter technology.
13.2 What changes, if any, need to be made to the current regulatory framework for current arrangements to improve deployment?	Potential changes to the framework to ensure greater participation of the market participants including LNSP's, spreading of unexpected customer costs across the market and reforms that encourage greater participation of all retailers in smart metering roll out.  The commission can also consider reviewing rules on remote reconnection and remote disconnection to allow greater flexibility to the retailers.
13.3 Are there other tools outside of the regulatory framework that may address some of the current barriers to realising the benefits of smart meters and/or the slower rollout of smart meters in the NEM?	For the market participants, the ideology behind the smart meter rollout needs to be expanded beyond existing platform focused on information and competition.  It needs to ensure that all consumers benefit. This includes adopting a more realistic sense of how consumers behave, not only around the smart meter and Smart Grid narratives of "enabling" or "empowering", but encompassing other factors

such as sabotage, defiance, anger, mistrust, and concerns over privacy.
Furthermore, key market participants need to continue to strengthen relationships with local authorities, councils, government authorities, charities, landlords, and other stakeholders, who can all become points of contact offering the customer more familiar surroundings and help dilute feelings of mistrust, resistance, or ambivalence.
Educating and empowering the end customer to the technology, services and support available to help them manage their consumption will help reduce some of the barriers.
Lastly, retailers and MCs need to better account for, and manage, potential vulnerabilities and as well as produce a broader range of outreach and communication materials that are easier to understand, for all customers, especially among

### **OTHER COMMENTS**

14. Information on	
additional issues	

the vulnerable and elderly customers.

#### **REGISTRATION OF INTEREST FOR REFERENCE GROUP**

If you are interested in nominating for the Review of the regulatory framework for metering services Reference Group you can email registations@aemc.gov.au or provide details of the person you would like to nominate below:

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