

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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PROJECT DETAILS

NAME OF RULE CHANGE: **Review of the regulatory framework for metering services**

PROJECT CODE: **EMO0040**

PROPONENT: **AEMC**

SUBMISSION DUE DATE: **11 February 2021**

CHAPTER 1 – INTRODUCTION

1. 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	EDMI observes that there is a robust political debate taking place in Australia with regards to environmental policy, particularly with regards to greenhouse gas targets and timeframes. It is evident that the political debate is trending closer to that of the general community and, therefore, it is probable that there will be a shift towards stronger

Commission has not identified?	environmental policy at both federal and state levels over the coming years. The reforms generated by such policy changes will highlight the importance of smart metering and the collection and monitoring of energy consumption across the country. EDMI recommends that the AEMC be mindful of such environmental reforms as it conducts this review.
1.2 Is there additional related work that the Commission should consider in this metering review?	EDMI encourages the AEMC to be mindful of the Prime Minister's recent public comments that Australia will aim to achieve net zero carbon emissions by 2050 – an improvement of some decades over the existing environmental target. Given the elevated target, a more rapid roll-out of smart meters will facilitate the widespread integration of low-emission energy technologies into the NEM, supporting the Government's environmental reforms.
2. Assessment framework – 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?	EDMI considers the AEMC's proposed Assessment Framework for this review to be adequate.

CHAPTER 3 – THE CS URRENT 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 roll-out of smart meters in Australia (excluding Victoria) since 2017 has been in line with the lower end of EDMI's volume expectations. Additionally, EDMI had expected market participants to take advantage of the enhanced smart meter features (beyond standard energy data features) from the outset of the competitive metering reforms. The movement towards the use of the advanced features in smart meters is now accelerating as evidenced, for example, in South Australia (solar connect/disconnect) and the introduction of smart meter supported services such as FCAS.
3.2 Is the current pace of smart meter deployment appropriate? What should be the appropriate pace of rollout?	As a manufacturer and supplier of smart meters and related services into the Australian NEM, EDMI has been pleased to work with MCs and other market participants to establish a robust competitive metering market. EDMI has met customer demand for increased volumes of smart meters year-on-year since the start of the reforms. EDMI is well-positioned to supply higher volumes of compliant smart meters to the Australian market as the deployment grows.
3.3 What benefits are smart meters providing consumers? Have the benefits changes or improved over time?	EDMI observes that many smart meter benefits accrue to consumers including: <ul style="list-style-type: none"> • Accurate and reliable energy consumption data – soon to be supplied on a 5-minute basis. • Access to more tariff options from energy retailers. • Improved services from energy comparison tools (such as Energy Made Easy) through more detailed consumption data.

	<ul style="list-style-type: none"> • In the case of consumers upgrading to smart metering, an inspection of their local switchboard condition and the confirmation that key account information is correctly recorded with the relevant market participants. • Increasing access to (or benefit from) ancillary services such as voltage monitoring, neutral impedance monitoring, outage monitoring, etc. • The ability to change retailer without the necessity of having meters and communications equipment changed. • The ability to install advanced equipment (eg: solar, inverter, battery systems) at a customer location and have all energy monitoring and control managed by a single smart meter. • Increasing use of remote connect/disconnect services – driving a cheaper overall cost of service for consumers.
<p>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?</p>	<p>Since the commencement of the competitive metering market, EDMI has observed the year-on-year reduction in smart meter prices. This has been brought about through competition and, in EDMI's case, the continuous improvement of our manufacturing and supply chain processes.</p> <p>At EDMI we are proud of our history of investment in our products here in Australia - several million dollars every year. We will proudly introduce our 'Next Generation' family of smart meters by 2022 which will include increased functionality at appreciably reduced prices.</p>
<p>4. Are incentives in the right place?</p>	
<p>4.1 Are the incentives in relation to smart meter rollout correct? Please provide details on why/why not.</p>	<p>EDMI does not believe that the incentives in relation to smart meter roll-out are optimal. The current customer led approach is delivering smart meters to consumers where it is efficient to do so, without, in most cases, direct additional cost being passed on to consumers. Energy consumers and retailers are benefiting from this approach, but no direct incentives exist to increase the volumes of deployment beyond the efficient consumer led approach.</p> <p>Smart meters can provide engineering data (Volts, Current, PF etc) that can underpin the efficient operation of the market and networks for the benefit of energy consumers.</p> <p>EDMI recommends the AEMC consider the introduction of regulatory instruments to place incentives on the market operator and network business to take advantage of the engineering data available in smart meters for the benefit of energy consumers.</p> <p>The current DNSP funding model incentivises the deployment of CapEx material assets rather than the provision of OpEx. At worst, this conflicts with the needs of the market and inhibits the roll-out.</p>
<p>4.2 Is the current market structure financially viable? If not, for whom is it not financially viable?</p>	<p>As a non-market participant, EDMI appreciates that there are financial challenges facing the NEM.</p> <p>EDMI understands that increased roll-out volumes will require a framework to be established to resolve issues at energy consumer premises (e.g. onerous installation notification obligations). EDMI believes that it is inappropriate that this</p>

	<p>financial burden rests solely with energy retailers and metering services businesses.</p> <p>EDMI encourages the AEMC to investigate how the market operator, energy networks and jurisdictional stakeholders could support the resolution of installation issues at energy consumers' premises. This support could be either via financial or regulatory instruments.</p>
5. Drivers of smart meter roll out	
5.1 What were your expectations regarding the drivers of smart meter rollouts?	<p>EDMI's expectations regarding the drivers for smart meter roll-outs were:</p> <ul style="list-style-type: none"> • Retailers would drive the roll-outs competing for customers and market share. • Networks would be significant beneficiaries of the roll-outs taking advantage of the increased volume of meters and related data available to manage the networks. • Customers would request, and/or retailers would be incentivised to provide, ancillary and advanced metering services. We have seen increasing evidence of this over the past 2 years particularly for solar/battery, EV installations, FCAS, etc. <p>There was also an expectation that the Federal and state governments would have been more influential drivers of the roll-outs – through targets, tax incentives, customer, or participant subsidies, etc.</p>
5.2 Have there been any changes in the overall reasons for installing smart meters since the <i>Competition in metering</i> rule commenced?	<p>EDMI observes that there is an increasing number of reasons for the installation of smart meters. These include:</p> <ul style="list-style-type: none"> • FCAS – successful regulator sponsored trials have led to an increase in FCAS implementations throughout the market. Smart meters facilitate the provision of near-real-time short-interval energy data to the FCAS provider and the market. • Virtual Power Plants (VPP) – Smart meters facilitate the ready aggregation of energy data from multiple energy sources, thus enabling the provision of VPP services to the market. • Neutral Integrity – interest in the provision of source impedance data to monitor the electrical safety of consumer premises has now reached a stage where commercial services have been offered to market participants. • Monitoring and management of solar/inverter/battery systems – measurement and connect/disconnect control managed through smart meters.
5.3 Which parties should be responsible for driving the roll out of smart meters?	<p>EDMI's current engagement with the National Electricity Market is principally through its commercial arrangements with Metering Coordinators. As appropriate, EDMI also engages commercially with retailer and network businesses in the NEM.</p> <p>EDMI acknowledges that the electricity retailers are currently responsible for driving the roll-out of smart meters in the NEM and would support the continuation of this arrangement on and ongoing basis. EDMI would also welcome the greater</p>

	involvement of network businesses as drivers of the smart meter roll-out, especially as recipients of smart-meter-related data services.
5.4 Do consumers have clear information on the benefits of smart meters and their rights relating to requesting a smart meter?	EDMI observes that most consumers are ignorant or, at best, ambivalent about the benefits of smart meters and their rights relating to requesting a smart meter. However, when presented with compelling or driving need (such as the installation of a solar/battery system), consumers then take a more focused interest in smart meters, smart metering services and the benefits of smart meter data.
6. Customer experience – what are your views on the customer experience in relation to smart meter rollout and installation?	<p>Significant improvements have taken place over recent years regarding installation efficiencies and safety. The result being minimum time spent on site with minimal revisits ensuring minimum customer inconvenience.</p> <p>In addition, initiatives such as neutral integrity add to customer confidence by providing safety indications.</p> <p>EDMI has invested significant effort working closely Meter Service Providers following a philosophy of “do it once, do it right” in order to provide cost effective outcomes and minimum customer disturbance.</p>
7. Industry Cooperation	
7.1 Do you have any suggestions on how industry cooperation can be improved?	<p>EDMI agrees with the AEMC that industry cooperation has been an issue. We believe our technology is a key enabler for all market participants to manage the transition of the NEM to increased levels of DER as Australia moves towards carbon neutrality.</p> <p>It is disappointing that the existing participants are not taking advantage fully of the opportunities smart meters create to operate the market efficiently for the benefit of energy consumers.</p> <p>Improved regulatory incentives on the market operator and participants to take advantage of the benefits of smart meters may encourage increased cooperation between the various parties.</p>
7.2 Are changes to the market structure or roles and responsibilities needed to improve the consumer experience?	<p>Should issues with the consumer metering installation be raised with the consumer by their retailer, the consumer is free to change retailers potentially creating a disincentive for retailers to proactively address issues.</p> <p>In the current market construct, the only constant for energy consumer is their network.</p> <p>Regulatory obligations may be required on networks to cooperate in assisting retailers with removing the barriers to metering installations (eg access to keys, fuse replacements, mitigating space issues etc.) by providing data or actively managing some of the physical issues that may exist at the consumer installation that prevents a meter from being installed.</p>
8. Expectations of metering services	
8.1 What expectations did you have around the services that smart meters would provide?	EDMI’s expectations regarding the services that smart meters would provide have been largely outlined in EDM I’s response to Question 3.3 above.

	<p>In short, EDM I anticipated that smart meters would provide enormous benefits to consumers. Firstly, all consumers have an unequivocal right to accurate billing and insulation from bill shock. Secondary, benefits such as minimising the inconvenience during move-in move-out by disconnecting supply have been somewhat realised. However, there are many more features and resources within a smart meter that need to be realised. EDM I are confident such features will pay real dividends as Australia moves toward a carbon neutral goal.</p> <p>At the commencement of the competitive metering market there was an acute lack of understanding about the extensive capabilities of smart meters and the role that smart meters would play in the market. EDM I observes that, as the market matures, understanding of the capability and benefits of smart meters is increasing progressively.</p>
8.2 What services are being provided by smart meters currently? Are these services widely available?	Aside from the above there is an appetite from consumers to access a more granular view of their consumption. Real time data delivered via a smart phone is a tangible demonstration of energy consumption as the change in energy consumption can be seen in response to a flick of a household switch.
8.3 What services do you expect from smart meters which have not eventuated?	<ul style="list-style-type: none"> Real time data DER control Voltage regulation Neutral integrity / source impedance Smart Demand management Safety overload disconnection Solar Management Management of EV charge and analysis Meter integration into the household HAN
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?	Gross solar metering and 5 min data is currently being rolled out to an existing fleet, the process of extending the capability of an installed fleet is a good example of flexibility and capability. EDM I is aware that many Meter Service Providers provide a future proof offering 5MS being the first of many such upgrades.

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?	<p>Modern meters can capture a vast array of data across 4 separate load surveys all at different intervals, so the question is what data is valuable to the market rather than technical restraints.</p> <p>In addition, modern head-end systems can automatically distribute data to relevant parties such as DNSP's, retailers and agregators.</p> <p>Gathering solar export data in SA is a good example of where the impact of solar disconnection on the grid can be well</p>

	understood prior to the need for critical disconnect/reconnect decisions.
9.2 In relation to metering data, who should be able to access metering data, and how? What protections should be in place?	<p>EDMI believes that the distribution of meter data is simply a matter of deciding:</p> <ul style="list-style-type: none"> • what data is required by each market participant; and • what service level (timeframes, frequency, quality) for data delivery is required by each market participant. <p>Please note meter data is encrypted and secure.</p> <p>EDMI do not want to be prescriptive regarding data recipients aside from saying the underlying technology easily supports such transactions.</p>
9.3 What impact do you think the Consumer Data Rights may have on the access to, and use of, metering data?	<p>The CDR is a framework to allow third parties to access consumer energy data – so it is about engaging energy brokers and aggregators more than anything else – Energy Made Easy being a key focus for the reform. There is an enormous amount to be gained from analysis of such data.</p> <p>These learnings can be utilised to create efficiencies in the grid, defer infrastructure spends and assist with technology advancements such as Distributed Energy Resources.</p> <p>Providing such data can be anonymised and distributed to authorised parties, this data will prove invaluable to the industry and end consumers.</p>
10. Future metering services	
10.1 What is your understanding of the other services that smart meters can provide?	Modern smart meters can provide a wealth of information from a real time import/export feed to a customer's smart phone through to managing onsite loads and dispatchable resources. Tapping into this intelligence would provide cost savings for the consumer and assist with network power quality regulation such as voltage and asset optimisation.
10.2 What future services do you expect or want metering to facilitate?	<p>Many of today's meter offerings are software based rather than being limited to metrology chip measurement. This technology, like modern smart phones can deliver App based functionality. Functionality would be delivered in response to market demands throughout the currently installed metering fleet. Examples could be:</p> <ul style="list-style-type: none"> • Max demand based intelligent control • Dynamic pricing response • Customer load disaggregation • Analysis of customer load serviceability (pool pumps and AC systems) • Avenues for retailers to influence consumers purchasing decisions
10.3 If additional services are to be provided by smart meters, how should the costs of providing these services be allocated?	From a technology provider perspective there is minimal cost impact to most additional services. Only compute cycles and data cost.
11. Penetration of smart meters required	

<p>11.1 Are particular metering services only cost effective when a particular penetration is achieved? If so, what services and what penetration is required?</p>	<p>Remote services do potentially require a relatively high penetration such that retail move in / move out processes can be optimised. EDM I is not in a position to comment on the amount of penetration required for these services to improve retail efficiency.</p> <p>The market led approach to metering services should be encouraging retail led deployment in areas that would benefit from remote services (e.g. where customer move in/move out transaction are high). The service should be enabled by the industry and then let its use drive deployment volume.</p> <p>EDMI feel that access to engineering data (Voltage, Current, PF, etc) from smart meters should be more readily available to market participants. The usefulness of this data will steadily improve as availability improves. It is likely good penetration already exists in some areas (like new subdivisions).</p> <p>EDMI do not see that lack of penetration is a valid excuse to not access the additional services available for smart meters.</p>
<p>11.2 What other factors are important in determining whether the provision of particular services are efficient or effective (e.g. geographic spread).</p>	<p>Some areas, such as remote communities or small towns on radial feeders could benefit if they were 100% converted to smart meters.</p> <p>Engineering data and the provision of remote services has the potential to improve efficiency and directly improve customer service levels.</p> <p>Regulatory incentives may be required to encourage these outcomes.</p>

CHAPTER 5 – ARE CHANGES REQUIRED TO THE REGULATORY FRAMEWORK?

<p>12. Encouraging the adoption of smart meters and future services</p>	
<p>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?</p>	<p>EDMI believes the industry needs more clarity around the provision of some future services.</p> <p>For example, some networks have expressed a desire to be able to receive engineering data in a standard format and delivery method / reliability regardless of the metering service provider.</p> <p>Some improved consistency in data may enable additional services to be built off the data.</p> <p>Energy data is currently collected from meters and distributed to the market such that the market can be settled, consumers billed, and networks can charge retailers. EDM I believe there maybe value in adding some engineering data from meters to the existing energy data collection and distribution process such that it can be readily consumed by the market and participants.</p> <p>Ownership rights of data (energy and engineering) remains a point of contention among market participants when trying to commercialise the data for provision to various participants. There may be a need to provide a framework under which data can be commercialised to enable the market to move forward. The CDR may help this but, arguably, some of the engineering data available in meters is system data and not consumer data so is not covered by the CDR.</p>

<p>12.2 To encourage the higher adoption of smart meters:</p> <p>(a) What changes, if any, need to be made to the current regulatory framework for metering services?</p> <p>(b) What changes, if any, need to be made to other instruments? (e.g. regulatory instruments, guidelines, codes)</p>	<p>EDMI believe the current regulatory framework and instruments should be assessed through the reference group the AEMC has proposed.</p> <p>The industry needs to better understand the capability of the modern smart meter</p> <p>All parties should have access to the benefits of smart meters and associated data as appropriate.</p> <p>DNSP funding model should be revised to better support the roll-out</p> <p>Regarding what changes should be made, EDM I will support the AEMC’s reference group to provide guidance regarding this matter.</p>
<p>12.3 Are there any other avenues of encouragement that are available that the Commission has not considered in this paper?</p>	<p>EDMI understands that Master Electricians Australia has been working with the metering industry via CMIG to establish a scheme where licenced electricians could be trained and authorised to install metering equipment. This scheme would create an environment where meters could be installed by the customers electrician when customer works are being done (e.g. new connections or solar installations). A scheme such as this could also provide a mechanism where customers who want to upgrade their installation switchboard could engage an electrician to do this and have the meter installed during the upgrade, potentially removing some of the issues around upgrades from retailers. EDM I understands that the competitive metering industry has had some issues with agreeing how such a scheme can exist in the competitive environment.</p> <p>The AEMC may want to examine if the metering framework could be expanded to accommodate such a scheme.</p>
<p>13. Barriers to realising the benefits of smart meters</p>	
<p>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?</p>	<p>No.</p> <p>EDMI believe this consultation has covered the salient points.</p>
<p>13.2 What changes, if any, need to be made to the current regulatory framework for current arrangements to improve deployment?</p>	<p>Consider including engineering data (Voltage, Current, PF) in the current market data collection and distribution requirements.</p>
<p>13.3 Are there other tools outside of the regulatory framework that may address some of the current barriers to realising the benefits of</p>	<p>The interplay of the NEM rules with jurisdictional electrical licencing and safety legislations should be examined.</p>

smart meters and/or the slower rollout of smart meters in the NEM?	EDMI do not believe the role of metering providers accredited under the NEM rules and as jurisdictionally licenced electrical contractors / workers is well understood. Better recognition of MP obligations as electrical contractors under the rules may remove some barriers currently experienced when managing metering installations.
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OTHER COMMENTS

14. Information on additional issues	-
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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 registrations@aemc.gov.au or provide details of the person you would like to nominate below:

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