

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: EDMI Pty Ltd

CONTACT NAME: Richard Newell

EMAIL: richard.newell@edmi.com.au

PHONE: 0434 147 869

DATE 28 October 2021

PROJECT DETAILS

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

PROJECT CODE: EMO0040

SUBMISSION DUE DATE: 28 October 2021

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?	EDMI is a participant in the AEMC Metering Services working group and is satisfied that the key benefits available from smart meters have been identified and documented by the working group.
b. What are stakeholders views on alternative devices enabling benefits? What are the pros and cons of these alternative devices?	EDMI agrees with the AEMC that the installation of additional measurement devices at customer premises to provide data which could be provided by the smart meter is not an efficient or cost-effective solution for customers or the NEM. EDMI is interested in customer-focused solutions that leverage the functionality and benefits of the smart meter. For example, linking a customer's smart meter to their smart

	<p>PV/battery management system would open access to a range of smart services benefitting the customer, retailer and DNSP.</p> <p>However, it should be noted that smart meters provide a secure and resilient communication to the home and that additional or linked functionality supported by consumers' Wifi networks adds complexity and potential security complications.</p>
--	---

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

<p>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?</p>	<p>Yes, a higher penetration of smart meters will enable a more comprehensive realisation of the benefits of smart meters. Benefits would accrue to:</p> <ul style="list-style-type: none"> • DNSPs – more comprehensive access to power quality data, load control functionality (eg: conditional connect/disconnect) and system status information. • Retailers – better access to 5min/15min data for billing (kWh and kW) data, remote connect/disconnect functionality and other customer-valuable information. • MCs/MSPs – scale benefits for installation, support and maintenance.
<p>b. Do stakeholders have any feedback on the level of smart meter penetration required for specific benefits? Or to optimise all benefits?</p>	<p>EDMI believes that once smart meter penetration exceeds 50% the benefits of smart meter deployment will incentivise more innovation (both technical and commercial innovation) and the economies of scale will reduce deployment costs.</p>

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

<p>a. Do you consider that the roll out of smart meters should be accelerated? Please provide details of why or why not?</p>	<p>Yes, setup costs for processes and systems are already sunk, so further roll out becomes cheaper as the number of deployed smart meters increases. MCs and MSPs have established their networks across Australia and will be able to leverage the benefit of their considerable investments.</p>
<p>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?</p>	<p>1 <u>Incentives</u> Benefits can be realised via options 2-4 below</p> <p>2 <u>Aged Replacement</u> A targeted aged meter replacement program would enable MCs/MSPs to develop a geographic efficient program of work which could be coupled with ongoing PoC meter installs. Additionally, such a program may take the pressure off</p>

	<p>retailers facing the responsibility of aged meter replacement programmes.</p> <p>3 Roll-Out Target Volumes Similar to (2) above, this option would provide MCs and MSPs with the opportunity to implement efficient smart meter roll-out programs.</p> <p>4 Backstop Date Similar to (2) above, this option would provide MCs and MSPs with the opportunity to implement efficient smart meter roll-out programs.</p>
c. How would each of these options for rolling out smart meters impact the cost profiles of smart meters?	With regards to aged meter replacement programmes, these have proved onerous to much of the industry over many years. EDMI believes that a roll-out program, where aged devices are replaced cost effectively, will be advantageous for the industry and will reduce costs for customers and market participants costs alike.
d. Are there other options that you consider would better provide a timely, cost effective, safe and equitable roll out of smart meters?	EDMI notes that MCs and MSPs have established their business (distribution and installation) networks across Australia. It is likely that accelerated further roll out may open economies of scale as the number of deployed smart meters increases.

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?	<p>EDMI believes that a higher penetration of smart meters will enable the market to more quickly realise the benefits of smart meters:</p> <p>1 More Meters, More Revenue Streams Retailers could create additional revenue streams by, for example, utilising data analytics to review household and appliance efficiency and to identify faults in consumer products and installation wiring within the home. Such faults could be reported as a service to customers.</p> <p>2 Regulated Costing EDMI notes the view expressed in the AEMC Directions Paper regarding cost sharing.</p> <p>3 Multiple Responsible parties EDMI considers the current arrangements are working satisfactorily in the PoC market.</p> <p>The current DNSP funding model favours the deployment of network assets as opposed to procurement of asset-based services. This could be addressed as part of a wider market reform process</p>
b. Do stakeholders have any feedback on the level of smart meter penetration required for	EDMI believes that once smart meter penetration exceeds 50%, the benefits of smart meter deployment will incentivise

specific benefits? Or to optimise all benefits?	more innovation (both technical and commercial innovation) and the economies of scale will reduce deployment 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?	EDMI agrees that the minimum service specification and physical requirements for smart meters are sufficient. Additionally, EDM I notes that the smart meter functionality is sufficient to accommodate new services required by customers and the market. For example, the recent changes in the SA market have seen the use of multi element smart meters to deliver stacked benefits providing both residential DER functionality and critical infrastructure backstop services.
b. Are there changes to the minimum service specifications, or elsewhere in Chapter 7 of the NER, required to enable new services and innovation?	Refer to 5a above.
c. What is the most cost-effective 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?	The existing Smart Meter specification can provide the necessary electrical safety outcomes required by the market. Multiple methods of capturing and reporting on safety related events are available. Depending on the specific safety service, the computation may be performed in the meter or in the upstream systems (head-end, back-end, cloud, etc). Data volume considerations may apply where processing takes place at the backend.
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, smart meters have an array of highly accurate Power Quality data features available along with alarming parameters. For example, PQ data can be distinct and recorded in multiple load surveys at variable intervals. It is EDM I's view that multiple parties should have access to the data, this functionality is already supported by the metering hardware and backend systems.
e. Can smart meters be used to provide an effective solution to emerging system issues?	Yes, assuming multi-element smart meters are the standard, the load behind these elements could be controlled to provide benefit for all parties (DER & backstop). Other examples: <ul style="list-style-type: none"> • Voltage control • Minimum load situations • FCAS • Generator restart • DER

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

<p>a. Do you agree there is a need to develop a framework for power quality data access and exchange? Why or why not?</p>	<p>Any framework should be designed in a fashion where it would not stifle innovation, ie: not limited to a specific data set.</p> <p>EDMI welcomes the opportunity to continue to work with our customers and other interested market participants to develop practical and commercial power quality solutions</p>
<p>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?</p>	<p>EDMI acknowledges the need for DNSPs to access power quality data.</p> <p>Somewhat related, please note that EDM I receives daily inquiries from consumers asking questions regarding how they can access data from their EDM I smart meters. The inquiries range from the simplistic (access to kWh data) to the complex (accessing the full range of EDM I smart meter functionality). This indicates there is interest from non-market participants to access meter data.</p>
<p>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?</p>	<p>Yes, in general terms, however care needs to be taken not to stifle innovation.</p>
<p>d. Do you consider the current framework is meeting consumers' demand for energy data (billing and non-billing data), and if not, what changes would be required? Is there data that consumers would benefit from accessing that CDR will not enable?</p>	<p>No, the current system is adequate for billing but falls short for the more informed energy consumers who require services such as:</p> <ul style="list-style-type: none"> • Real time import export • Better understanding of consumer loads and appliance running costs • Disaggregation • Peer to peer trading and other emerging technologies.

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

<p>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).</p>	<p>There is only a minor technical impact to EDM I as our backend systems accommodate such services today. There will be cost implications associated with communications, data collection and data distribution.</p>
<p>b. 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?</p>	<p>In the PoC environment, data collection costs are borne by the MCs. Increases in the volume of data collected and stored will have cost impacts. Increasing the number of market participants receiving data will likely increase data collection, storage and distribution costs. Such costs must be considered in the overall benefit analysis.</p>

<p>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?</p>	<p>There will be slightly increased compute and data overhead, but systems already cater for such services. However, it would be highly dependent on the complexity of architectural and framework changes.</p>
<p>d. What are the costs and benefits of a negotiate-arbitrate structure to enable data access for metering? Is there value in exploring this option further? (e.g. coverage tests or non-prescriptive pricing principles).</p>	<p>EDMI recognises that such negotiations would likely play out between retailers, DNSPs, MCs and the market operator. Should additional parties be granted direct access to the smart meters, then the security and access processes and protocols will need to be reviewed.</p>
<p>e. Are there any other specific options or components the Commission should consider?</p>	<p>Under current market rules EDMIs commercial arrangements are primarily with MCs and MSPs.</p>

CHAPTER 3 – QUESTION 8: A HIGHER PENETRATION OF SMART METERS WILL ENABLE MORE SERVICES TO BE PROVIDED MORE EFFICIENTLY

<p>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?</p>	<p>Yes. Peer to peer trading is a good example of a valuable service that would require a high penetration of smart meters before all consumers could effectively participate.</p>
<p>b. Noting recommendations in incentives and the roll out, are there other considerations for economies of scale in current and emerging service models?</p>	<p>As Australia moves towards its carbon neutral future, the role of smart meters will be key to the implementation of energy efficient (eg: increasing DER) solutions benefitting customers, the environment and the energy industry.</p>

CHAPTER 3 – QUESTION 9: IMPROVING CUSTOMERS' EXPERIENCE

<p>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?</p>	<p>As mentioned previously, EDMIs receives regular inquiries from consumers seeking to access data from their smart meters. EDMIs refers such customers back to their respective retailers. There is clearly an appetite from customers to understand more deeply the available services and functionality that smart meters offer. Customer experience would be enhanced if they understood how they could access their data simply and seamlessly.</p>
<p>b. Should an independent party provide information on smart meters for customers? If so, how should this be implemented?</p>	<p>EDMI believes that this is a promising idea. As mentioned above, many customers are unaware of the benefits that smart meters can provide. Such an independent party could provide benefits to consumers and, at the same time, remove an administrative burden from certain market participants.</p>

<p>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?</p>	<p>EDMI considers that this is a good idea, providing a current smart meter is not being displaced and it is cost effective for the retailer to do so.</p>
--	--

CHAPTER 3 – QUESTION 10: REDUCING DELAYS IN METER REPLACEMENT

<p>a. Do you have any feedback on the proposed changes to the meter malfunction process?</p>	<p>No, 15 and 60 days seem appropriate to EDM I.</p>
<p>b. Are there any practicable mechanisms to address remediation issues that can prevent a smart meter from being installed?</p>	<p>Modern smart meters have retained the many of the footprint features (eg: drill hole dimensions) from previous meters. This enables efficient installation and negates the need to drill into asbestos in some cases. Some smart meters are available on the AS1284.4 type (plug-in) type bases enabling rapid installation and reducing power down times at the consumer switchboard.</p>

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

<p>a. Do you have any feedback on the proposal to reduce the number of notices for retailer-led roll outs to one?</p>	<p>No, however one notification seems reasonable to EDM I.</p>
<p>b. What are your views on the opt-out provision for retailer-led roll outs? Should the opt-out provision be removed or retained, and why?</p>	<p>Yes, as Australia moves towards more DER and carbon neutrality, accumulation meters will no longer fairly represent the true cost of generating and delivering energy.</p>
<p>c. Are there solutions which you consider will help to simplify and improve meter replacement in multi-occupancy premises? Should a one-in-all-in approach be considered further?</p>	<p>Where AS1284.4 type bases are used (refer to EDM I's response to Q10b). EDMI supports a framework whereby smart meters are mandated for all situations including, for example, embedded networks.</p>

CHAPTER 3 – QUESTION 12: FEEDBACK ON OTHER INSTALLATION ISSUE

<p>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?</p>	<p>No further comments from EDM I.</p>
---	--

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	No. EDMI notes that our primary engagement in the NEM is through our MC and MSP customers and (to a lesser extent) our DNSP customers.
---	--

OTHER COMMENTS

a. Information on additional issues	-
-------------------------------------	---