

Review of the Regulatory Framework for Metering Services

Response to the AEMC Consultation Paper: Review of the Regulatory Framework for Metering Services

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Key messages

- » Energy Networks Australia (ENA) strongly supports a focus on positive ‘real-world’ customer outcomes rather than the prioritisation of a theoretical construct of promotion of competition.
- » The reforms introduced under the competition in metering rule change have not met expectations and have not resulted in beneficial customer outcomes.
- » ENA supports the introduction of changes to improve the efficiency and effectiveness of the regulatory framework for metering services in order to enable the future grid and better meet customer expectations. ENA considers the following amendments would facilitate the delivery of improved customer outcomes:
 - The implementation of a basic set of metering data should be provided to DNSPs as a regulatory requirement. This data will enable improved safety outcomes for the community, more efficient network planning and investment, greater visibility of the LV network, and more accurate DER impact assessments.
 - Future network services are likely to efficiently utilise other, more advanced data and services to deliver beneficial customer outcomes. A negotiation framework, including some form of arbitration procedure, is best placed to facilitate the purchase of more advanced data and services. No stakeholders should be specifically excluded by contract or agreement from entering negotiations for the provision of advanced data and services
 - To reduce the overall costs of data delivery to customers in a competitive market, an independent body should develop a well-defined set of standards that specifies the data format and delivery performance of the minimum services that Metering Coordinators provide.
- » ENA recommends that the AEMC undertake an additional review of the metering framework in three years time to determine whether customer outcomes are being achieved, whether additional changes to the framework are required to promote customer outcomes and whether industry cooperation and compliance are adequate.

1 Overview

Energy Networks Australia appreciates the opportunity to provide a response to the Australian Energy Market Commission’s (AEMC or the Commission) Consultation Paper on reviewing the regulatory framework for metering services (Consultation Paper)¹.

Energy Networks Australia (ENA) is the national industry body representing Australia’s electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

ENA welcomes the metering competition review and strongly supports amendments to the framework that are likely to produce customer-centric outcomes. Specifically, ENA recommends that the scope of

¹ AEMC, [Consultation Paper, Review of the Regulatory Framework for Metering Services](#) (December 2020)

minimum network data that Metering Coordinators (MCs) must provide to Distribution Network Service Providers (DNSPs) should be expanded to include basic metering data that will allow DNSPs to deliver use cases that will facilitate better outcomes for customers. The establishment of a negotiation framework, including some form of arbitration procedure, will better enable DNSPs to access advanced data from MCs. There are also efficiencies that can be gained from developing a set of standards for the data format and delivery specification of the data generated from smart meters.

ENA believes it would be beneficial if the AEMC were to undertake an additional review of the metering framework in three years' time. The review would assess whether the expected customer benefits are being achieved and whether additional changes to the framework are required.

2 Background

2.1 Competition in metering rule change

The AEMC finalised its rule change process for the [*Expanding competition in metering and related services*](#) rule (*Competition in metering*) in November 2015, with the rule commencing on 1 December 2017². The metering competition framework transferred the responsibility of providing metering services for newly installed advanced meters from DNSPs to a new party, known as Metering Coordinators (MCs). DNSPs continue to be responsible for existing accumulation and interval meters.

MCs are registered participants that perform the role of providing metering services for advanced meters. Retailers appoint the MC for new metering installations except where a large customer has appointed its own MC.

MCs have overall responsibilities for all issues relating to metering installations for which they have been appointed. To assist with the provision of services, MCs appoint a Metering Provider (MP) for each connection point to provide, install, and maintain the meter installation as well as a Metering Data Provider (MDP) who is responsible for the collection and processing of metering data.

The AEMC's final *Competition in metering* rule determination outlined five expected customer benefits to be delivered from the reform³, including:

- » better information,
- » cost-reflective pricing,
- » better network service,
- » better retail service, and
- » new products and services.

² AEMC, [*Expanding competition in metering and related services*](#), Final determination (November 2015), p. XV.

³ AEMC, [*Expanding competition in metering and related services*](#), Final determination (November 2015), p. 35.

2.2 Metering competition review scope

The AEMC specified in its final *Competition in metering* rule determination that it would undertake a review three years after the commencement of the metering framework, which would consider:

- » whether small customers should be able to appoint their own MC instead of just retailers, and
- » whether some form of access regulation to metering services and smart meter data (referred to as metering data) is required⁴.

The scope of the current metering review has expanded beyond that originally anticipated by the AEMC, with the purpose of the review now to determine:

- » whether the reforms introduced under the *Competition in metering* rule have met expectations,
- » whether amendments are required to improve the efficiency and effectiveness of the regulatory framework for metering services, and
- » whether the regulatory framework enables the implementation of other key policy reforms under which metering services will play a role⁵.

ENA welcomes and supports the expansion of the AEMC's metering review's scope.

During development of the contestable metering framework, ENA maintained strong concerns that there were key risks associated with the framework that had the potential to undermine the AEMC's intended outcomes. These risks were addressed to various degrees during consultation to develop the framework. However, some of these risks, such as the potential difficulty for DNSPs to access metering services under commercial negotiation⁶ appear to have arisen in practice.

Prior to the publication of the Consultation Paper, the AEMC conducted initial consultation with stakeholders including DNSPs, to establish whether stakeholder expectations of the competitive metering framework have been met. ENA's assessment is that customer outcomes have fallen short of the original five customer expectations that the AEMC expected to be delivered under the framework. We look forward to working collaboratively with the AEMC and other stakeholders to improve the effectiveness of the framework for customers.

3 Metering roll out

3.1 The current state of smart meter roll out

Smart meters are rolled out under the contestable metering framework by MCs on behalf of retailers. MCs then appoint a MP, who is responsible for the installation of a smart meter. Retailers may request installation of a smart meter for three broad reasons:

- » Customer requests, predominately for new connections involving solar PV installations,

⁴ AEMC, [Expanding competition in metering and related services](#), Final determination (November 2015), p. vi.

⁵ AEMC, [Consultation Paper, Review of the Regulatory Framework for Metering Services](#) (December 2020), p. 5-6.

⁶ ENA, [ENA submission to AEMC Draft Determination on Competition in Metering and Related Services](#) (May 2015), p.2.

- » Replacement of malfunctioning meters, including a single meter or a ‘family fault’ where a fleet of similar meters is replaced because they have high meter testing failure rates, and
- » Retailer-led installations, which consumers may opt out of.

The Consultation Paper states that as of June 2020, the penetration of smart meters in the National Electricity Market (NEM), excluding Victoria, is around 17.4 per cent. The largest driver for new meter installations is customer requests driven by the need for new meters with the installation of solar PV⁷, followed by new connections and meter repairs, with retailer-initiated deployments being the smallest driver.

It is also likely that a relatively higher proportion of the 17.4 per cent smart meter penetration is skewed towards new building developments relative to older ones as new developments are built with smart meters as standard.

DNSPs are appointed as the MC for all basic accumulation and interval meters in the NEM. Under the National Electricity Rules (NER), the Financially Responsible Market Participant (the customer’s retailer) is required as soon as possible to nominate a new MC if a Meter Fault and Issue Notification is raised. The new MC will then arrange for the installation of a smart meter.

However, ENA is aware of a large proportion of metering sites across multiple DNSPs where meter failure has been detected (both family fault and individual failure) and where Meter Fault and Issue Notifications have been raised by the DNSP, but the DNSP remains appointed as the MC and is unable to install smart meters under the NER. For example, in September 2020, Ausgrid still had over 50,000 meters that had incurred a family failure between December 2017 and December 2018 but where a new MP had not been appointed by the retailer-appointed MC.

The AER has also recently issued penalty notices to a retailer for failing to appoint dedicated MCs, in some cases for more than 500 days⁸.

3.2 Current customer outcomes

Customer outcomes delivered under the framework have fallen short of expectations. From a network perspective, customers are not currently receiving outcomes that meet the AEMC’s expectations of a better network service and more cost-reflective pricing.

Better network service

Despite some small-scale trials, DNSPs are yet to gain ongoing access to metering data through negotiated arrangements with MCs. The inability to access basic metering data has prevented the development of use cases that will benefit customers by enhancing the ability of DNSPs to provide a safe, reliable, and secure network. It has also restricted DNSPs from making best use of available hosting capacity.

⁷ AEMC, [Consultation Paper, Review of the Regulatory Framework for Metering Services](#) (December 2020), p. 21.

⁸ AER, [AER takes action against AGL for not promptly fixing customers’ meters](#) (January 2021).

Limited access to metering data and the associated lack of low-voltage network visibility is preventing DNSPs from implementing beneficial customer use-cases. For example, DNSPs are unable to detect and rectify faulty neutrals, which pose safety concerns for the community. DNSPs are similarly restricted in their ability to improve network planning and management capabilities. Issues with access to data and potential customer use cases that would be implementable if basic data were accessible are discussed in [sections 4.2](#) and [4.3](#) respectively.

Additionally, the current low penetration of smart meters means that the overall volume and dispersion of meters in local areas is insufficient in some areas for DNSPs to draw the volumes of data required to deliver some use cases to enhance outcomes for customers. As the penetration of smart meters continues to increase, the potential for DNSPs to implement beneficial customer use cases also continues to improve. Once a critical mass of smart meters has been achieved in a region, there is a step change in the benefits that metering data can provide and the penetration of smart meters supports additional DNSP use cases. However, without access to data, neither a low or high penetration of smart meters will ultimately deliver the suite of potential network benefits to customers.

As a general example, DNSPs do not currently have good low-voltage network visibility in brownfield areas where DER uptake can be high and DNSPs are unable to access metering data. These areas are challenging for DNSPs to manage because older, more established suburban areas suffer from legacy data (inaccurate, paper-based records) as well as ageing assets that were designed without DER as a consideration. Access to some data in these types of areas would provide a general uplift in network visibility and consequential ability to efficiently manage the network. If the smart meter penetration is high and DNSPs have access to data from a high saturation of smart meters, additional use cases such as active voltage management could be implemented. These use cases will ultimately deliver cost reductions and service improvements for customers.

Cost-reflective pricing

Cost-reflective network pricing is the principle that customers' network prices should reflect the efficient costs of providing network services to customers. Cost-reflective network prices, such as time of use tariffs, are much better at incentivising efficient use of the network (i.e. at non-peak times) and can lead to lower overall costs for customers through deferred or avoided network investment. Cost-reflective pricing is an important driver for better overall network utilisation and lower overall customer costs.

DNSPs are restricted in their ability to roll out cost-reflective pricing as they are limited by the pace at which smart meters are installed. DNSPs are only able to place customers on more cost-reflective tariffs once a smart meter has been installed, limiting DNSP ability to incentivise efficient network usage and reduce costs for customers. DNSPs are working with the AER, AEMC and other stakeholders to ensure that cost-reflective pricing rewards customers for using the network more efficiently and improves overall customer outcomes.

3.3 Should the pace of meter roll out be expedited?

Benefits and costs of an expedited roll out

As the penetration of smart meters increases, the number of use cases that DNSPs are able to implement similarly increases. As mentioned in [section 3.2](#), once a critical mass of smart meters has been reached, there is a step change in the number of use cases that DNSPs can implement because more meters can

provide an accurate sense of the state of the network, especially during power system events. There are therefore likely customer benefits from expediting the smart meter roll out and reaching higher penetrations of smart meters sooner.

Expediting the smart meter roll out could also generate efficiencies for the MP, who has responsibility for installing meters. The MP role displays monopoly characteristics in that it has high economies of scale and scope, for instance to replace numerous meters in an area that all require replacement, or to perform connections at the same time as meter installations. Drawing some of these efficiencies into the MP role could lead to a lower overall cost of meter roll out.

Expediting the meter roll out could also improve the economies of scale for MCs, enhancing their ability to deliver cost effective metering data services and improving the likelihood that customers will derive additional value from their smart meters. Customers who have already paid for the installation of a smart meter would be more likely to receive benefits from their smart meter in a shorter timeframe.

However, there are also material costs associated with an expedited smart meter roll out. The reforms were predicated on giving customers the power to drive smart meter adoption, but very few customers have actively sought a smart meter. Rather, the triggers for smart meter installation are largely driven on an as-required basis, such as via customer request because their new solar PV installation requires a smart meter, or the original meter has failed. Expediting the meter roll out is therefore likely to require the replacement of some meters prior to their end of life.

In ENA's view, there is value in the AEMC undertaking a cost-benefit analysis of the business case for expediting the smart meter roll out to assess whether the expected customer benefits outweigh the costs.

A few mechanisms that could help facilitate an expedited meter roll out are as follows:

- » A retailer-led roll out target to install a certain penetration of meters by a certain date, allowing the market freedom to identify an efficient pathway to achieve the target.
- » Capturing additional efficiencies in the metering roll out that are not currently captured, for example installing multiple co-located meters at once (i.e. a whole street, or all customers on a shared fuse) rather than on an individual basis to reduce the overall customer expense of the metering roll out. Capturing additional efficiencies may be challenging due to the coordination required between multiple retailers, MCs and the DNSP.
- » Allowing the DNSP to be appointed as the MP *by the competitive MC at their request*. This would likely yield efficiencies through economies of scale and scope, reduce coordination and operational costs, allow timelier meter installation and customer connection and also presents a feasible option to install multiple co-located meters at once. ENA is interested in understanding whether this option is workable within the current framework.
- » Prioritising installation of smart meters for life support customers who rely on continuous power supply for medical equipment. The additional functionality that smart meters provide could lead to enhanced benefits such as the ability to:
 - accurately determine whether a life support customer has incurred an outage,
 - respond quicker and restore supply to life support customers sooner, and
 - improve communication with life support customers, for example to provide outage notifications.

Recommendation two

- » ENA recommends that the AEMC undertake a cost benefit analysis of the business case for expediting the smart meter roll out and explore any potential implementation mechanisms.

4 Meter data acquisition and use cases

4.1 Current meter service provision

Under the current metering framework, the NER requires that all installed meters must meet the *minimum services specification*⁹. The *minimum services specification* mandates that all meters must be capable of:

- » Remote disconnection,
- » Remote reconnection,
- » Remote on-demand meter reads,
- » Remote scheduled meter reads,
- » Remote retrieval of metering data (such as voltage, current, power and frequency), and
- » Advanced meter reconfiguration (ability to enable/disable data streams to parties).¹⁰

These are the minimum requirements of a smart meter.

The NER specifies that the local network service provider is able to request the above services but only to the extent that, “*in the Metering Coordinator’s reasonable opinion, such access is reasonably required by the Local Network Service Provider to enable it to meet its obligations to provide a safe, reliable and secure network*”¹¹. The AEMC’s view during the final rule determination was that there may be limited circumstances where access to metering data should be provided to certain parties outside of commercially agreed terms.¹²

Additionally, the NER specifies that metering data can also be shared with third parties, including DNSPs, upon successful commercial negotiation between the MC (via the MDP) and the third party.

The NER also specifies that the MC must provide certain parties, such as DNSPs, with particular types of metering data in order to meet DNSPs’ obligations under AEMO’s procedures. Under the NER, the minimum data required to be shared with DNSPs is settlements data to assist with determining distribution service charges for customer billing purposes¹³.

⁹ NER clause 7.8.2

¹⁰ NER schedule 7.5, Table S7.5.1.1

¹¹ NER, clause 7.15.4(b)(3)(i)

¹² AEMC, [Expanding competition in metering and related services](#), Final determination (November 2015), p. 240.

¹³ NER, clause 7.11.1(g)

4.2 Limitations of data access under the current metering framework

The current penetration of smart meters is sufficient to allow DNSPs to implement some process and network management practice improvements, with others becoming feasible as the penetration of smart meters increases and more data is available. However, the largest barrier to the implementation of potential use cases is the ability of DNSPs to access basic metering data. Potential use cases that DNSPs could implement to produce beneficial customer outcomes are outlined in [section 4.3](#).

In ENA's view, it has never been more important to allow DNSPs access to basic metering data, which ENA defines as *instantaneous 5-minute readings of voltage, current, real and reactive power per phase provided to DNSPs at least every 24 hours*. It is becoming more challenging for DNSPs to manage their networks while optimising network investment as more distributed energy resources are connected without data to inform significant levels of uncertainty. Improved access to basic metering data will enable the development of use cases that enhance DNSPs' ability to provide a safe, reliable and secure network and make best use of available hosting capacity.

During its original rule change determination, the AEMC's intent was that DNSPs and MCs would negotiate mutually beneficial terms for the provision of metering data from MCs to DNSPs. While DNSPs and other stakeholders raised concerns around the effective monopoly power of the MC in such an arrangement, the AEMC posited that DNSPs are a monopsony buyer¹⁴ and would have significant countervailing buying power for metering services¹⁵.

In practice, it has been challenging for DNSPs to secure ongoing access to metering data that is of sufficient volume and quality in a timely manner. In most instances, DNSPs have been unable to negotiate access to metering data. Notably, there is no aspect of the current metering framework that incentivises MCs to minimise the costs of providing data to DNSPs, nor is there an obligation for data to be provided at cost effective prices. The AEMC identifies in its Consultation Paper that they have only been able to identify 'a few instances' where DNSPs and MCs have entered into commercial agreements for the provision of data to DNSPs¹⁶.

A further complication is the difficulty of justifying metering data acquisition expenditure to the AER. The negotiated costs of metering data acquisition are unpredictable over time and there is uncertainty as to whether a data stream from a particular MC will continue over time, noting that MCs can change.

ENA is also aware of instances where the MC's contractual obligations with the retailer prohibit the MC from providing metering data in excess of settlement data, let alone reaching commercially negotiated terms for the provision of data capable of being captured under the *minimum services specification*.

In the absence of metering data, DNSPs are able to install a network device adjacent to a metering installation to record and provide their own metering data. Installing network devices is clearly not in the long-term interests of customers as this creates a risk that customers will effectively pay twice for overlapping services. However, DNSPs should retain the ability to install their own network devices as this

¹⁴ A monopsony is a market with a single buyer who holds market power to drive prices down because there is no one else to sell to.

¹⁵ AEMC, [Expanding competition in metering and related services](#), Final determination (Nov 2015), p. 476.

¹⁶ AEMC, [Consultation Paper, Review of the Regulatory Framework for Metering Services](#) (Dec 2020), p. 33.

places a ceiling on the price able to be charged by MCs for access to data. It is important to note that the ability to install network devices only places a ceiling on the price MCs can charge for access to data and does not necessarily mean that all prices below the ceiling price are cost-effective. The current inability to source appropriate data on cost-effective terms is strengthening the business case for DNSPs to install network devices in some areas.

4.3 DNSPs' use of metering data

With appropriate access to basic metering data, DNSPs will be able to deliver a range of improved network services that will ultimately provide benefits to customers. The *instantaneous 5-minute readings of voltage, current, real and reactive power per phase provided to DNSPs at least every 24 hours* will improve the ability of DNSPs to monitor, plan, manage and improve their LV network.

For example, some use cases include:

- » **Faster rectification of community safety issues.** For example, the ability to detect faulty neutrals, which allows DNSPs to fix and replace them in a timely manner and deliver a safer network, reducing the potential for electrocution events.
- » **Greater visibility of network voltage performance,** including accurate assessments of DER capacity for customer connection applications and improving the ability of DNSPs to forecast the impact of DER on their networks. Better DER forecasting will improve network management and planning capabilities and deliver better customer outcomes by allowing customers to maximize their PV export capacity during periods of high generation while ensuring safe, secure and reliable operation of the LV network.
- » DNSPs can deliver a **higher level of service to customers** with more timely access to data, particularly for minor issues such as brown-outs where supply is maintained but intermittent. More accurate information can also be conveyed to affected customers, improving their customer experience.
- » **Better data to inform future tariff pricing incentives** for customers to consume power during off-peak periods to potentially delay otherwise necessary network investment.

Victorian DNSPs already have access to more advanced metering data through their own smart meter fleets and are currently delivering most of these use cases for their customers. A significant learning from the Victorian smart meter roll out has been that as the frequency of information transfer to DNSPs becomes closer to real-time, the number of potential use cases (and associated customer benefits) increases.

4.4 Basic data should be included in the minimum data service provided to all DNSPs

[Section 4.2](#) highlights the current limitations in the ability of DNSPs to access metering data under the current framework, while the use cases outlined in [section 4.3](#) demonstrate that there are material customer benefits that can be derived if DNSP access to basic metering data was facilitated. The ability of DNSPs to deliver network services that ultimately benefit customers would be improved if the level of access to basic metering data was expanded.

Given commercial negotiations for data acquisition have been limited in their success and the scope of potential customer benefits is significant, ENA believes that the scope of minimum metering data that MCs must provide to DNSPs should be expanded to include basic metering data, which we have defined in [section 4.2](#) as *instantaneous 5-minute readings of voltage, current, real and reactive power per phase provided to DNSPs at least every 24 hours*.

It is ENA's current understanding through DNSP involvement in metering trials and the current *minimum services specification* defined in the NER, that this type of basic metering data can be gathered and provided every 24 hours at a relatively low marginal cost. The NER specifies that all smart meters must be capable of remote retrieval of metering data, such as voltage, current, power and frequency. ENA's current understanding is that the marginal cost for MCs to provide data is relative to the frequency that data is provided to third parties. ENA supports the AEMC reviewing the feasibility of expanding the minimum metering data that MCs must provide to DNSPs to include basic metering data.

To the extent that there are marginal costs of expanding the scope of minimum metering data provision to include basic metering data, one option for MCs to recover their costs is through the standard fee that MCs charge to retailers for the provision of metering services. Retailers are best placed to bear this cost because this approach is more likely to place competitive pressure on the MC's cost of data provision. In the event that retailers are dissatisfied with the costs of data provision (included in the overall fee for metering services), retailers are able to appoint a different MC who may have a lower marginal cost.

If the marginal cost of basic metering data provision continues to be included in the negotiations between MCs and DNSPs, the MCs' marginal cost of data provision is less likely to be revealed because DNSPs do not have the ability to appoint a new MC, resulting in a greater likelihood of higher prices for customers. ENA notes that if MCs must provide a set of data to DNSPs, this also places a natural incentive on MCs to minimise their costs.

ENA believes that this amendment to the metering service framework to include the provision of basic metering data as standard offers the most timely, effective and cost-efficient means to unlock some of the customer benefits from smart meters that were originally intended but have so far not been realised. Given it will be customers who ultimately pay for this service either through their retailer or DNSP, ENA recommends that it is better for customers to pay a more efficient price through their retailer rather than a less efficient price through their network charge.

Recommendation three

- » ENA recommends that the scope of minimum metering data that MCs must provide to DNSPs should be expanded to include *instantaneous 5-minute readings of voltage, current, real and reactive power per phase provided to DNSPs at least every 24 hours*, which we define as basic metering data.
- » ENA recommends that to the extent that there are marginal costs to develop the capability of providing basic metering data, these costs should be built into the fee that the MC charges the retailer as this is likely to result in a better outcome for customers.

4.5 DNSP access to advanced data and services

DNSPs must currently negotiate with MCs for the provision of metering data beyond settlements data. As outlined above, ENA is recommending that basic metering data should be provided to DNSPs, including *instantaneous 5-minute readings of voltage, current, real and reactive power per phase provided to DNSPs at least every 24 hours*. The marginal costs for this data provision are best managed by retailers through the fee that MCs charge retailers for providing meter services.

With this data, DNSPs would be able to implement several use cases that are likely to result in customer benefits. However, there are also other use cases that DNSPs may be able to implement if they had access to more advanced data and services. We define advanced data and services as *types of data and services that are not captured in our definition of basic metering data*. This could include data provided more frequently than every 24 hours, or on demand, or other services provided by the MC.

ENA believes that DNSPs will be able to effectively utilise advanced data and services to implement additional use cases in the future and that the most efficient approach to managing the network in the future will likely utilise some form of advanced data and services. For example, with the provision of data on a more frequent basis or the provision of different types of data (i.e. non-basic data), DNSPs would be better placed to respond to constrained areas of their network stemming from increased levels of DER uptake among their customers by implementing dynamic voltage control.

The current inability to reach commercial agreement for the provision of basic metering data does not give ENA confidence that the current commercial negotiation arrangements will result in efficient outcomes for customers. We believe instead that a negotiation framework, including some form of arbitration procedure, should be implemented. This negotiation framework should specify that no stakeholder who can access data under the NER¹⁷ can be specifically excluded by contract or agreement from entering negotiations for the provision of advanced data and services.

Establishing a workable negotiation framework for advanced data and services is beneficial because advanced data and services can yield some current benefits even at low smart meter penetration, but the benefits may not exceed the costs for most use cases at lower penetrations. As smart meter penetration reaches sufficient levels and the amount of DER installed continues to increase, a negotiation framework is more likely to successfully facilitate data acquisition when the benefits to customers (and willingness to pay) outweighs the cost of provision for each advanced data stream and service.

The *minimum services specification* mandates that all smart meters should be capable of recording numerous data streams including voltage, current, power, frequency, and average voltage and current. ENA currently understands that the majority of costs to provide these types of data to third parties are proportionate to how often the data is provided to third parties. For example, that it is much more expensive to provide data every 30 minutes to third parties than it is to provide data every 24 hours.

Given this understanding, a negotiation framework appears best placed to facilitate the provision of advanced data and services at a time when it becomes economically viable for both MCs and DNSPs. An arbitration framework that both DNSPs and MCs can rely on to resolve any impasse is likely to promote the achievement of long-term beneficial customer outcomes.

¹⁷ NER clause 7.15.5.

Recommendation four

- » ENA recommends that a negotiation framework, including some form of arbitration procedure, should be implemented to facilitate the purchase and use of advanced data and services. No stakeholders, including DNSPs, should be specifically excluded by contract or agreement from entering negotiations for the provision of advanced data and services.

4.6 Standardisation

There is little to no standardisation of offerings between metering data providers, perpetuated by variable uptake, capability and pricing of different data providers in a small market. Due to the lack of national standards for network-related metering data and services, the data sets generated by MCs come from different systems and are often in various formats.

The lack of standardisation increases the cost and complexity of the systems required for DNSPs to utilise metering data from various MCs and is an impediment to the development of innovative network use cases. It also increases data transaction costs because MCs and DNSPs must align their systems and capture these costs in negotiations. Additionally, the process to acquire data can also vary between MCs.

ENA believes that there is a strong case for the development of a well-defined set of standards that specify the data formats and delivery performance of the data and services that MCs should provide. These standards would not preclude other data formats and services from being offered, rather they would identify a common specification so that DNSPs and MCs could align their systems and reduce overall transaction costs. The standards could for instance be established under the future framework for DER standards currently under consideration by the Energy Security Board (ESB).

Recommendation five

- » ENA recommends that an independent body develop a well-defined set of standards that specify the data format and delivery performance of the services that MCs should provide, noting that this does not preclude other formats and services from being delivered.

4.7 Further framework review in three years

Given the importance of a functioning and efficient metering framework, ENA believes it would be prudent for the AEMC to undertake a further review of the metering framework in three years time. ENA suggests that the review could assess whether customer outcomes are being achieved, whether additional changes to the framework are required to promote customer outcomes and whether industry cooperation and compliance are adequate.

Recommendation six

- » ENA recommends that the AEMC undertake an additional review of the metering framework in three years time to determine whether customer outcomes are being achieved, whether

additional changes to the framework are required to promote customer outcomes and whether industry cooperation and compliance are adequate.

5 Operational issues

5.1 Shared fusing

In order to install a meter in a location where multiple customers share a fuse, the electricity supply must be isolated for all customers on that fuse, resulting in an outage for all customers supplied by the fuse. If only one customer's meter is replaced per supply isolation, every customer on the shared fuse will need to be isolated several times irrespective of whether their meter is being replaced or not.

Shared fusing customers also face delays when they require the installation of a new meter or replacement of a faulty meter due to the number of parties involved in shared fusing meter replacement. Electrical contractors have been facing major issues in coordinating with Retailers and MCs to replace existing metering assets. Even with the recent rule change in May 2020¹⁸ to provide greater certainty to customers with shared fusing on when their meter installation will occur, it remains a slow process.

DNSPs are responsible for the network up to the point of supply and have defined obligations under the current rules and ring-fencing arrangements. ENA is aware of instances where service orders have been submitted to DNSPs for meter installations, yet DNSPs are no longer responsible for completing advanced meter installations.

Older sites with a shared fuse are more susceptible to safety issues such as hidden and exposed wiring and asbestos. Asbestos is detected in many ageing legacy metering assets that are now classified as asbestos contaminated material. In certain jurisdictions, this makes it illegal to relocate or reinstall these legacy meters under Work, Health & Safety legislation.

As raised in [section 3.3](#), if the metering framework allowed the DNSP to be appointed as the MP *by the competitive MC at their request*, this could present a feasible option to install multiple co-located meters at once. ENA is interested in understanding whether this option is workable within the current framework.

Recommendation seven

- » ENA recommends that the AEMC should assess whether there are opportunities to improve the metering arrangements for shared fuse customers and to improve the safety and efficiency of the process for shared fuse installations, including the discretion for the MC to appoint the DNSP as the MP.

¹⁸ AEMC, [Rule Determination, National Electricity Amendment \(Introduction of Metering Coordinator Planned Interruptions\) Rule](#) (May 2020)

5.2 Industry coordination

ENA understands that the installation and energisation of a smart meter can require numerous parties to be onsite at a metering installation to complete the connection and energisation of a customer. The level of required coordination can lead to negative customer experiences in the form of multiple site visits from industry participants and delays associated with simple meter replacement and connection works. ENA believes that it would be worthwhile exploring workable solutions to enhance coordination and improve the customer connection experience.

As raised in [section 3.3](#), if the metering framework allowed the DNSP to be appointed as the MP *by the competitive MC at their request*, this could allow timelier meter installation, customer connection and energisation. ENA is interested in understanding whether this option is workable within the current framework.

6 Concluding remarks

On a broader level, ENA believes that there are lessons that should be learnt from the experiences of introducing a competitive metering framework. The framework has not resulted in beneficial outcomes for customers, while some of the foreseen risks of the framework such as the inability to access data and operational complications with the metering roll out have occurred in practice.

As the AEMC considers any potential reforms arising from this review, or seeks to undertake other regulatory reviews potentially delineating monopoly and unregulated services in light of technology change occurring in the sector, ENA believes that there needs to be a strong focus on real-world outcomes for customers on price and service outcomes. The evidence from competitive metering clearly demonstrates that a simplistic presumption that competition will always deliver outcomes that are in the best interests of customers does not always play out in practice.