



# Consumer Data Right in Energy

Position paper: data access model for  
energy data

August 2019

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## 1. Glossary

ACCC	Australian Competition and Consumer Commission
Act	<i>Competition and Consumer Act 2010 (Cth)</i>
AEMO	Australian Energy Market Operator
API	Application programming interface
CDR	Consumer data right
Consumer data	CDR data that relates to a consumer
designation instrument	A legislative instrument designating the energy sector
Explanatory Memorandum	The explanatory materials to the Treasury Laws Amendment (Consumer Data Right) Bill 2019, as passed by Parliament on 1 August 2019.
Exposure Draft Rules	Exposure Draft Rules issued by the ACCC on 29 March 2019
Gateway	A gateway as designated by a designation instrument referred to in subsection 56AC(2)(e) of the <i>Competition and Consumer Act 2010 (Cth)</i> .
NEM	National Electricity Market
Register	ACCC Register of Accredited Data Recipients
Rules	Rules made by the ACCC under section 56BA of the <i>Competition and Consumer Act 2010 (Cth)</i>
Standard/s	The technical standards made by the Data Standards Chair

## 2. Overview

The consumer data right (**CDR**) is an important reform that will give Australians greater control over their data, empowering consumers to choose to share their data with trusted recipients for purposes the consumer has authorised. After banking, the CDR will be rolled out to data in the energy sector, helping consumers to get tailored and innovative products and services.

This paper sets out the Australian Competition and Consumer Commission's (**ACCC**) position on its preferred data access model for the CDR in the energy sector. Consideration of the appropriate data access model is a threshold issue for the implementation of the CDR in energy, as it impacts the authorisation and authentication arrangements for the energy sector, the standards that will be developed, and the allocation of liability.

The data access model also affects the extent to which accredited data recipients and data holders will interact with the ACCC Register, which will list the entities accredited to receive data under the CDR and the entities that will share data within the scope of the CDR.

We have considered stakeholder views on the merits of three data access model options: the Australian Energy Market Operator (**AEMO**) centralised model, the AEMO gateway model and the economy-wide CDR model. Discussion of these models against the following assessment criteria is at **section 4**:

- user functionality
- cost effectiveness
- interoperability
- efficiency of relevant markets
- reliability, security and privacy
- flexibility and extensibility
- ability to facilitate timely CDR implementation.

In summary, the gateway model is the ACCC's preferred data access model for third party access to energy consumer data in the National Electricity Market (**NEM**). This is because the gateway model:

- is the most suitable model to enable timely and effective implementation of the CDR for energy consumer data by leveraging AEMO's existing data transfer infrastructure and efficiencies in liaising with the ACCC Register of accredited data recipients<sup>1</sup>
- leverages AEMO's energy data and IT expertise, and its ability to facilitate industry readiness for and compliance with initiatives involving substantial IT components
- is considered to most comprehensively address the assessment criteria. This view is supported by the majority of stakeholders that expressed a preference for a model.

**Section 5** discusses our position in detail. In reaching our position we have had particular regard to the gateway model's interoperability with the broader CDR ecosystem. We consider the development of the CDR standards by the Data Standards Body to be key to achieving this. Energy data holders should expect that the CDR requirements for providing data to the gateway will differ from the current protocols and processes used by the energy industry in business-to-business transactions.

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<sup>1</sup> The ACCC Register will list the entities accredited to receive data under the CDR (accredited data recipients) and the entities that will share data within the scope of the CDR (data holders). It will be the source of truth for these entities to discover information about each other, so that data can be transferred from data holders to accredited data recipients.

Having reached this threshold position, we are looking forward to working with stakeholders to implement the gateway model to access energy CDR data. This, alongside our broader work in developing the CDR ecosystem, will ensure consumers are able to unlock the benefits of being able to share their data with trusted third parties.

## 2.1. Scope

Under section 56AC of the *Competition and Consumer Act 2010* (Cth) (**Act**), the application of the CDR to energy will be achieved by specifying the energy data holders and data sets to which the CDR applies through a designation instrument issued by the Minister. The designation instrument will also specify whether a gateway is designated, taking into account the ACCC's position on the preferred data access model. The Treasury is currently undertaking work on the potential scope and content of the initial designation instrument for the energy sector (see **section 6.3**).

While the exact scope of the designation instrument is yet to be decided, the data sets designated in the first iteration of the CDR in energy will be limited to those available in the NEM. Our position on the data access model reflects this, while recognising a possible future expansion of the CDR in energy.<sup>2</sup>

In addition, our position relates only to a data access model for accredited data recipient (i.e., third party) access to energy CDR data, which, subject to the designation instrument, will include both product data and/or data that relates to a consumer (**consumer data**).<sup>3</sup> We envisage that consumers will continue to be able to access their energy data directly from energy industry participants under current national energy legislation arrangements.<sup>4</sup>

## 3. Consultation

### 3.1. Consultation paper and public forum

We released a consultation paper for public comment on 25 February 2019.<sup>5</sup> We sought stakeholder views on the merits of the following data access models, as a precursor to determining the CDR rules that will apply to the energy sector:

1. **AEMO centralised model**—AEMO would be the sole data holder of a centralised data set, which includes consumer energy data that it currently does not hold under national energy legislation, and would be responsible for providing CDR data directly to accredited data recipients.
2. **AEMO gateway model**—AEMO would provide a gateway function, providing CDR data from data holders (which may include retailers and potentially distributors) to accredited data recipients. AEMO may also be a data holder providing CDR data directly to accredited data recipients.<sup>6</sup>

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<sup>2</sup> Under section 56AD of the *Competition and Consumer Act 2010* (Cth), any expansion of the CDR in energy beyond the initial designation instrument (for example, to non-NEM electricity data and gas data) would be subject to a number of considerations, including that the ACCC must analyse, consult and report about an instrument proposing to designate a sector.

<sup>3</sup> Whether the gateway is used for generic product data may depend on the entity or entities designated as data holders of this data. The model used for third party access to consumer data will not necessarily be used for third party access to general product data.

<sup>4</sup> Under Rules 28 and 56A of the National Energy Retail Rules, small customers are able to access historical billing data and electricity metering data for the previous two years from retailers on request. Rules 86A and 86B allow small customers to access their electricity metering data and gas consumption data from distributors on request.

<sup>5</sup> ACCC, *Consumer Data Right in Energy, Consultation paper: data access models for energy data*, February 2019, [www.accc.gov.au/system/files/ACCC%20consultation%20paper%20%20data%20access%20models%20for%20energy%20data.pdf](http://www.accc.gov.au/system/files/ACCC%20consultation%20paper%20%20data%20access%20models%20for%20energy%20data.pdf).

<sup>6</sup> For the purposes of this position paper, any references to a 'gateway' mean a gateway designated by a designation instrument referred to in subsection 56AC(2)(e) of the *Competition and Consumer Act 2010* (Cth). To be clear, we are not referring to 'gateway' in the computer networking and telecommunications context.

3. **Economy-wide CDR model** – existing data holders (for example, retailers) would be responsible for providing CDR data directly to accredited data recipients and/or consumers. This is the model for the implementation of the CDR in the banking sector.

The 39 submissions we received to the consultation paper have provided valuable feedback and informed the development of our position.<sup>7</sup> High-level themes are summarised in **section 3.2**.

On 18 March 2019, we held a public forum in Sydney to discuss stakeholder views on the consultation paper. A summary of the forum and presentation slides are available on the ACCC website.<sup>8</sup>

## 3.2. Summary of submissions

Of the stakeholders that expressed a preference for a particular data access model, the gateway model was most preferred, followed by the economy-wide model.<sup>9</sup> Significantly fewer stakeholders preferred the AEMO centralised model. Some stakeholders did not express a preference because they needed a detailed cost-benefit analysis of the models or information on authorisation and authentication arrangements.

In terms of trends within stakeholder groups, energy retailers (including the industry body) mostly supported the gateway model, while distributors took varying positions. While there were some differing views among technology companies, the majority preferred the economy-wide model. The two price comparison websites that made submissions preferred the centralised model. Preferences varied among other stakeholder groups, such as consumer groups and government bodies.

Some stakeholders proposed alternatives or variations to the data access model options posed in the consultation paper, including:

- to transfer and receive data, energy retailers (as data holders) should continue to use AEMO's B2B e-Hub, accredited data recipients can use the application programming interface (**API**) designed for the CDR and AEMO should connect the two domains via APIs that meet the data standards
- if a gateway model is adopted, it should not be mandatory. Participants should have the option of using the gateway or the economy-wide model.

The former may be difficult to achieve under the Act, as Part IVD of the Act provides for binding standards to form a three-party contract between a data holder, gateway and accredited person. We consider the latter raises complexity associated with a dual framework. We therefore have not pursued these options further.

Stakeholders provided varied and at times contrasting feedback on the advantages and disadvantages of each of the model options. **Table 1** summarises stakeholders' views. We note stakeholders had different views on the implementation and ongoing costs of the models relative to each other. Given its ability to introduce efficiencies in interfacing with the ACCC Register (see **section 5.1**) and to leverage AEMO's expertise, we consider the gateway model to be the most cost effective of the models. Our additional comments on the cost effectiveness of each of the models are provided in **sections 4.1 to 4.3**.

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<sup>7</sup> Submissions are published on the ACCC website at [www.accc.gov.au/focus-areas/consumer-data-right-cdr/energy-cdr/consultation-on-energy-data-access-models](http://www.accc.gov.au/focus-areas/consumer-data-right-cdr/energy-cdr/consultation-on-energy-data-access-models).

<sup>8</sup> The forum summary and presentation slides are published on the ACCC website at [www.accc.gov.au/focus-areas/consumer-data-right-cdr/energy-cdr/consultation-on-energy-data-access-models](http://www.accc.gov.au/focus-areas/consumer-data-right-cdr/energy-cdr/consultation-on-energy-data-access-models).

<sup>9</sup> After the gateway model and the economy-wide model, stakeholders preferred either the gateway model or the economy-wide model, without stating a specific preference.

**Table 1: Stakeholder views on advantages and disadvantages of model options**

Advantages	Disadvantages
<b>AEMO centralised model</b>	
<ul style="list-style-type: none"> <li>• <i>Single point of contact</i>: provides a single point of contact and enables ‘one-click’ functionality for accredited data recipients to access data in a streamlined way, which would support improved customer outcomes. The most efficient, accessible and transparent means of collating and disseminating data for consumer use.</li> <li>• <i>Data standardisation</i>: allows for better standardisation of data and is best suited for making generic product data generally available.</li> <li>• <i>Limits retailer knowledge of customer behaviour</i>: promotes competition by limiting a retailer's knowledge that a customer may be contemplating switching.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Service reliability</i>: centralised point of access presents a series of potential disadvantages including inability to meet high demand, and/or a degradation/loss of service and may result in a single point of failure.</li> <li>• <i>Cost</i>: of the three options, the centralised model is the most expensive to implement due to high costs incurred in building a centralised system and costs incurred by data holders in order to replicate their data to the centralised system.</li> <li>• <i>Privacy and data security</i>: there are risks associated with AEMO holding, managing and distributing data it currently does not hold, including the potential to cause major inconsistencies in consumers’ data. The model requires AEMO to store personal information out of the control of the originally entrusted holder and is likely to have significantly higher cost and complexity without any countervailing benefits.</li> <li>• <i>Regulatory framework reform</i>: would require substantial amendment to national energy legislation to give AEMO the power to hold and manage customer data.</li> <li>• <i>Outside of CDR framework</i>: cannot be considered under Part IVD of the Act without supporting changes to national energy legislation, as the Act does not allow a data holder to provide data to another party to then provide the data to others.</li> </ul>
<b>AEMO gateway model</b>	
<ul style="list-style-type: none"> <li>• <i>Utilises existing infrastructure and expertise</i>: takes into account AEMO’s existing market operator role, systems already in use and processes familiar to market participants. The gateway recognises AEMO’s technical expertise in developing data standards and accreditation processes. It is the most timely and cost-effective way to implement the CDR in the NEM because it leverages existing systems.</li> <li>• <i>Scalable</i>: AEMO’s existing IT infrastructure is flexible to the changing landscape and would more easily be able to facilitate the addition of data, data holders and data receivers over time and at least cost, compared to the economy-wide model.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Service reliability</i>: centralised point of access via a gateway presents a series of potential disadvantages including inability to meet high demand, and/or a degradation/loss of service and may result in a single point of failure. The gateway model has an increased likelihood of data provision delays and errors leading to ad-hoc functional issues as more data sets and data holders are managed.</li> <li>• <i>Consumer experience</i>: AEMO does not have an existing relationship with consumers or accredited data recipients in other sectors. Using AEMO introduces inconsistency and complexity for consumers to engage in the wider CDR ecosystem and</li> </ul>

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- *Data security*: requires far fewer data links and authentication processes compared to the economy-wide model.
  - *Cost*: likely to result in the lowest implementation and ongoing operating costs. The gateway model:
    - will be able to source data from AEMO databases (at no cost to participants) and databases from other providers. It could help accredited data recipients source data from a variety of data holders more cost effectively than the economy-wide model
    - may provide one source of consent management and accreditation confirmation
    - minimises the infrastructure requirements for data holders compared to the economy-wide model, negating costs associated with duplication of development of technical capabilities, auditing and compliance regimes.
  - *Value-adding role*: AEMO can play a ‘gatekeeper’ of customer data role in standardising the format of data sought by accredited data recipients from data holders and avoiding the mismatch of data. AEMO can also assist in reducing delays in data provision from data holders or retailers’ customer retention activities.
  - *Supporting role*: AEMO is well-placed to play a supporting intermediation role in the CDR. For example, AEMO could assist smaller retailers to understand their obligations as data holders.
- would require substantial education to build trust.
  - *Cost*: likely to have the greatest costs as data holders would be required to develop relevant APIs. The gateway model imposes additional costs by including a middleman in the data retrieval process.
  - *Impact of future developments in energy*: if the data sets in energy are only focussed on metering data, the gateway model would become redundant with the introduction of five minute market and global settlement, where AEMO will receive full energy consumption data from all energy retailers.
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### Economy-wide model

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- *Data security*: decentralised model provides high security of data. Allows all parties of an ecosystem to engage with each other in a way where actual trust is not required as it is imposed via encryption.
  - *Interoperability*: supports a high degree of interoperability and facilitates innovation. The economy-wide model is most consistent with the banking sector and is likely to be least cost, with costs more directed to those seeking to benefit from the data.
  - *Reduces barriers to entry*: potentially reduces the complexities and barriers to entry faced by smaller retailers.
  - *Impartial*: provides an impartial solution that is freely accessible by the entire industry;
  - *Complexity*: the economy-wide model does not appropriately recognise the multitude of players in the industry. The model would require approximately 3000 data links, significantly increasing the potential attack surface. CDR participants will have to confirm they can talk to every connection, for every system upgrade. Accredited data recipients may need to approach multiple retailers or other parties to collate data for a time period.
  - *Costs*: of the three options, the economy-wide model will result in the highest implementation costs because:
    - multiple data relationships will increase development costs, including costs of data exchanges, regulating the secure
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gives the industry an equal say in its development.

transfer of data, and investigating breaches in data transfers

- the model duplicates third party accreditation confirmation and consent management. Data holders will need to build an interface with the ACCC registry, and these costs will be borne by all participants
- accredited data recipients will have to build and maintain API connections with each retailer or utility.
- *Data integrity*: could potentially create variations in data sets between accredited data recipients based on consolidation logic, interpretation and use. In retailer failure situations, consumer data may be lost.
- *Incentives of data holders*: placing the onus of data liquidity on data holders where data sharing is a conflict with core business models is likely to result in sub-optimal experiences for consumers and accredited data recipients.
- *Consumer experience*: consumers would be required to provide explicit approvals associated with multiple, disparate energy related data sets, which would severely limit the potential for effective interoperability. Multiple authorisation requests will impede speed of service to consumers.
- *Scalability*: each new data set or data holder would require additional processes and procedures to manage interactions with an accredited data recipient.

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## Assessment criteria

We sought stakeholder views on whether any assessment criteria other than those proposed in the ACCC consultation paper should be used to determine the preferred data access model. Stakeholders suggested the following additional criteria should be used to assess the data access model options:

- *Impact of current and future regulatory arrangements*: two stakeholders suggested we should consider the impact of current and future regulatory arrangements to ensure recommendations for the implementation of the CDR are integrated and aligned with future reforms.
- *Risk of delay*: one stakeholder considered that, given the importance of data access in ensuring that customers are able to choose the best energy deal and manage their electricity bills, we should also assess the extent to which the data access models risk a delay to the implementation of the CDR in energy.
- *Criteria relating to the characteristics of the data transfer solution*: one stakeholder suggested that additional criteria should include 'source data provision complexity', 'transaction costs', 'single point of failure risk' and 'complexity of authorisation and authentication'.

- *Enabling innovation*: one stakeholder considered that we should assess the extent to which the data access models enable innovation.
- *Ongoing cost of operation*: one stakeholder considered that we should assess the ongoing cost of operation, including the extent to which data holders' infrastructure investment to develop their CDR capability will be able to support future industry developments.

We consider that all of the above suggestions, with the exception of the risk of delay, are in part considered in the existing assessment criteria or out of scope for the purposes of forming a position on the preferred data access model. Specifically, the 'cost effectiveness' criterion takes into account the impact of current and future regulatory arrangements, transaction costs and the ongoing cost of operation. The 'single point of failure risk' can be considered as part of the existing 'reliability, security and privacy' criteria, while 'interoperability' in part considers whether the models enable innovation. Innovation is also relevant to the 'efficiency of relevant markets' criterion.

We consider that 'source data provision complexity' and 'complexity of authorisation and authentication' are out of scope as the former is a matter for the energy CDR designation instrument, and the latter is to be decided in future work.

Given the potential for the CDR use cases in energy to benefit consumers, we agree that the extent to which implementing the models may risk a delay in delivering the CDR should be considered. We have therefore included an 'ability to facilitate timely CDR implementation' as an additional assessment criterion.

## 4. Discussion of models

### 4.1. AEMO centralised model

Criteria	ACCC comments
<b>User functionality</b>	The centralised model provides a high level of user functionality, as users have a single point of access for all energy CDR data.
<b>Cost effectiveness</b>	The centralised model is not cost effective at this time, due to the substantial changes that would be required to existing data flows and data storage arrangements in the national energy market.
<b>Interoperability</b>	The centralised model is capable of delivering interoperability.
<b>Efficiency of relevant markets</b>	The centralised model would have a negative impact on the efficiency of relevant markets, due to the cost and complexity of centralising energy CDR data.
<b>Reliability, security and privacy</b>	The centralised model would require an appropriate security profile to ensure reliability, security and privacy issues are addressed. A centralised model for data storage involves greater risk of privacy and security breaches, as well as the risk of a single point of failure.
<b>Flexibility and extensibility</b>	The centralised model is the least likely of all three models to provide flexibility and extensibility, due to the difficulties associated with centralising gas data and data from non-NEM jurisdictions within AEMO.
<b>Ability to facilitate timely CDR implementation</b>	The centralised model is the least capable of all three models of facilitating timely CDR implementation, due to the substantial changes that would be needed to national energy legislation, current NEM data flows and data storage arrangements that would be required under this model.

#### Conclusions on the AEMO centralised model

Overall, the centralised model does not rate well against the assessment criteria relative to the gateway and economy-wide models. While we acknowledge the simplicity of a single data holder and point of access for accredited data recipients under the centralised model, we have disregarded this model as a viable option because:

- the model would create significant implementation costs and complexity associated with centralising data, which would require very significant changes to national energy legislation and NEM processes
- centralised storage of a comprehensive data set of energy consumer data raises increased concerns with respect to privacy and security
- there was a general lack of support for the model, particularly amongst energy participants
- the centralised model would create a heavier regulatory burden on CDR participants and consumers.

## 4.2. AEMO gateway model

Criteria	ACCC comments
<b>User functionality</b>	<p>The gateway model has the potential to simplify authorisation and authentication arrangements where multiple data holders are involved in a transaction, but this depends on the arrangements that are developed. The ACCC considers that this model provides a high level of user functionality.</p>
<b>Cost effectiveness</b>	<p>A key advantage of the gateway model is the ability for AEMO to assist in a staged rollout to the energy sector and play a facilitation role, particularly with respect to smaller energy retailers. AEMO's oversight of B2B e-Hub accreditation for new entrants provides a readiness process for on-boarding parties that can be leveraged for the CDR. Leveraging this process could reduce participants' implementation costs.</p> <p>As the gateway will interface directly with the ACCC Register (see <b>section 5.1</b>), the gateway will reduce implementation costs for energy retailers, particularly those that do not become accredited data recipients, by removing the need for them to link with the Register in order to authenticate accredited data recipients.</p>
<b>Interoperability</b>	<p>The gateway model should facilitate interoperability, provided standards for the gateway are developed to be consistent with the standards used in other sectors.</p>
<b>Efficiency of relevant markets</b>	<p>The gateway model has some potential advantages in relation to retailer 'save/win back' behaviour, but the ACCC considers these advantages are not sufficiently material to have a significant impact on the assessment of this criterion. The ACCC notes the concerns expressed by some stakeholders on the potential for the gateway model to have a detrimental impact on innovation as the CDR data market matures. However, we also note the views expressed in a number of submissions that smaller retailers and accredited data recipients would incur lower costs under a gateway model relative to the economy-wide model, which would facilitate the development of innovative products. As we discuss in our position (<b>section 5</b>) we will review the gateway's operation once the CDR has been implemented in several sectors to ensure it is achieving the CDR's aims regarding innovation.</p>
<b>Reliability, security and privacy</b>	<p>The ACCC considers that, in relation to reliability, security and privacy, the gateway model may be less advantageous than the economy-wide model due to the pooling of personal data, and the creation of a single point of failure. The ACCC notes however that significant amounts of sensitive personal information already passes through AEMO's B2B e-Hub, and that AEMO's significant IT capability enables it to implement measures to mitigate the increased risks to reliability, security and privacy under the gateway model.</p>

<b>Flexibility and extensibility</b>	To be extended outside the NEM, the gateway model would require parties that have not previously used AEMO systems to interface with the gateway. In this respect, the model is less extensible than the economy-wide model. However, the gateway model is readily extensible to embedded networks within the NEM. Further, the model is designed to enable the sharing of data that is not directly held by AEMO, and in this respect the model has the potential to be extended beyond the NEM, including to gas data sets.
<b>Ability to facilitate timely CDR implementation</b>	The ACCC anticipates that the gateway model will facilitate timely CDR implementation as AEMO's role as gateway would position it to assist data holders with implementation and undertake readiness coordination and conformance checking.

### 4.3. Economy-wide model

<b>Criteria</b>	<b>ACCC comments</b>
<b>User functionality</b>	The economy-wide model leverages existing energy industry processes for user authentication. However, relative to the centralised model, this model provides a more involved authorisation arrangement for customers whose data is held by multiple parties (for example, where the consumer has switched retailer). The ACCC considers that, overall, this model provides a high level of user functionality, but notes that user functionality can be marginally impacted where a customer has had multiple retailers over the period for which data is sought.
<b>Cost effectiveness</b>	The ACCC notes the differing views of stakeholders on the cost-effectiveness of the economy-wide model. The ACCC notes that the economy-wide model would require each energy retailer to interface with the ACCC Register, which may impact on their implementation costs, particularly for any retailers that do not become accredited data recipients. The model's cost effectiveness and implementation costs may be affected by the absence of a party to play a co-ordinating role with respect to implementation across industry.
<b>Interoperability</b>	The economy-wide model facilitates interoperability, as the standards for the CDR in energy would be consistent with the standards used in other sectors.
<b>Efficiency of relevant markets</b>	The economy-wide model is conducive to innovation as the CDR data market matures.
<b>Reliability, security and privacy</b>	The economy-wide model, with its decentralised data access arrangements, reduces the risks associated with reliability, security and privacy relative to the other data access models
<b>Flexibility and extensibility</b>	The economy-wide model is extensible to data sets outside the NEM as energy data sets and use cases for energy data expand over time.

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**Ability to facilitate timely CDR implementation**

The economy-wide model is less likely to facilitate timely CDR implementation in energy, as data holders would need to undertake implementation without benefiting from AEMO's oversight of readiness and conformance through its gateway role.

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## 5. Our position

### Our position in summary

The gateway model is the ACCC's preferred data access model for third party access to energy consumer data. This is because the gateway model:

- is the most suitable model to enable timely and effective implementation of the CDR for energy consumer data by leveraging AEMO's existing data transfer infrastructure and efficiencies in liaising with the ACCC Register of accredited data recipients
- leverages AEMO's energy data and IT expertise, and its ability to facilitate industry readiness for and compliance with initiatives involving substantial IT components
- is considered to most comprehensively address the assessment criteria. This view is supported by the majority of stakeholders that expressed a preference for a model.

We consider the gateway and economy-wide models are both feasible options. As raised in submissions (**section 3.2**), each model offers distinct advantages and disadvantages. However, taking into consideration the characteristics of the NEM, implementation considerations and stakeholder views, the gateway model is our preferred data access model for third party access to energy consumer data.

In addition to our considerations against the assessment criteria (**section 4.2**) and the strong support of the majority of stakeholders that expressed a preference for a model, the gateway model offers two main advantages:

- It offers efficiencies in the data transfer infrastructure build by utilising AEMO's existing Shared Market Protocol (e-Hub). While existing procedures may need to be adapted for the standards developed by the Data Standards Body, leveraging AEMO's current data transfer infrastructure is the most suitable model to enable timely and effective implementation of the CDR for energy consumer data. In addition, the gateway model enables a single point of interface with the ACCC Register of accredited data recipients (see **section 5.1**). This will reduce the scope of the IT build that is required of energy retailers (if they are designated as data holders), with the exception of those retailers that become accredited data recipients and are therefore required to link with the ACCC Register.
- The gateway model leverages AEMO's energy data and IT expertise. AEMO's significant experience managing data flows to operate the power system and its strong track record delivering complex IT change projects will assist the implementation of the CDR for energy consumer data in an efficient way. AEMO is also well positioned to perform a 'value-adding' role by facilitating industry readiness through oversight of each participant's interface with the gateway, which will help ensure smaller retailers' compliance with CDR obligations.

At present, we are not aware of other sectors where a gateway would be an option as the primary model for third parties to access consumer data, and consistent with the Explanatory Memorandum, we expect there will be limited circumstances when a gateway will be designated.<sup>10</sup> Adoption of a gateway model for energy consumer data recognises AEMO's

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<sup>10</sup> Treasury Laws Amendment (Consumer Data Right) Bill 2019, Explanatory Memorandum, paragraph 1.95.

current functions in the NEM as a centralised market ‘clearing house’ and market operator, and its expertise in energy data.

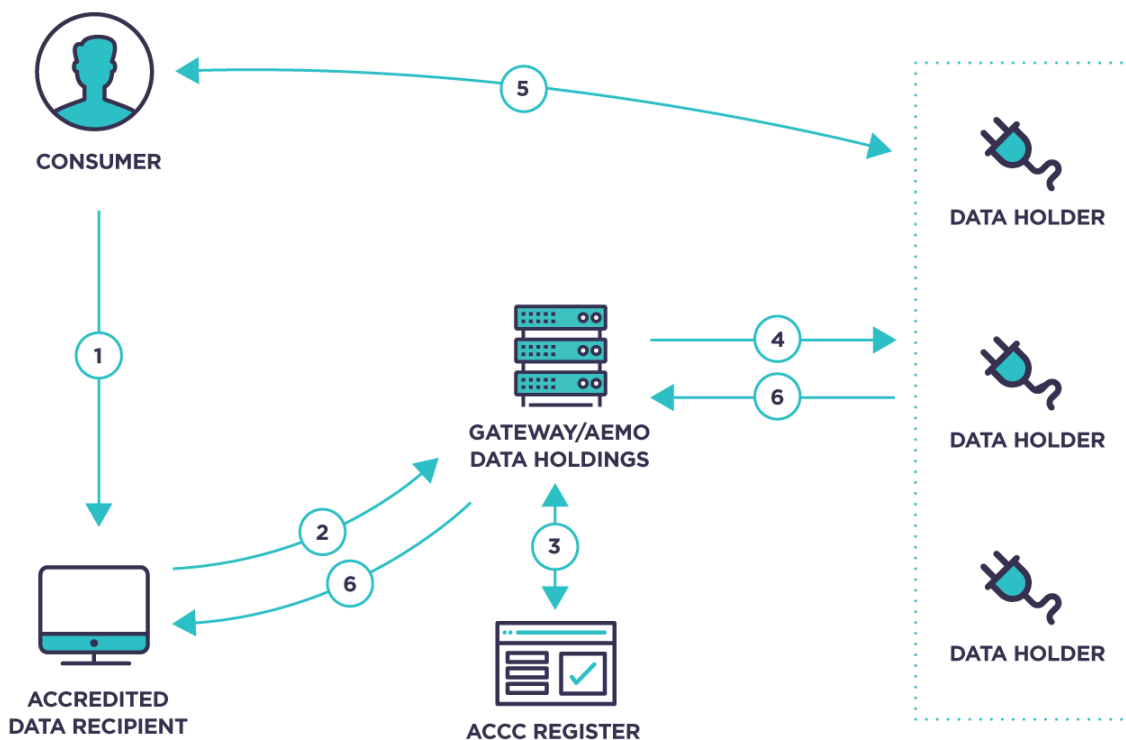
We acknowledge the addition of a gateway adds a layer of complexity to be dealt with in the development of the CDR rules and data standards, to ensure interoperability with the broader CDR ecosystem. While the gateway model proposes to leverage existing AEMO infrastructure via the Shared Market Protocol, energy industry participants should expect that the CDR requirements for providing data to the gateway will differ from the current protocols and processes used by the energy industry in business-to-business transactions. Relevant requirements will be established in the CDR rules and standards developed respectively by the ACCC and the Data Standards Body in consultation with stakeholders.

If designed and implemented consistently with the objectives of the CDR, we do not consider a gateway to be a barrier to interoperability, and are committed to ensuring the technical solution supports this. To this end, we will commence a review of the gateway’s operation three years after the CDR’s commencement in energy. The review of the gateway will have regard to the other sectors within the CDR at that time, to ensure the gateway is giving effect to interoperability and economy-wide reform.

Adopting the gateway model will also likely require changes to the NEM regulatory framework. Any required changes will be overseen by the COAG Energy Council.

## 5.1. The gateway model

Figure 1: High-level transaction flow including the ACCC Register (third party access)



1. The consumer consents to an ADR obtaining their data.
2. The ADR contacts the gateway, seeking to access the consumer's data.
3. The gateway authenticates the ADR using data previously obtained from the ACCC's Register.
4. The gateway identifies which data holder(s) hold the consumer's data and provides transaction details to them.
5. The process of authentication and authorisation occurs in accordance with any requirements in the CDR energy rules. The gateway's role in this process is to be determined.
6. The consumer's data is shared with the ADR via the gateway.

The consultation paper provided a high-level description of how we envisaged a gateway model would work, including AEMO's dual roles as gateway for the data it does not hold, and as data holder for the data it does. The consultation paper noted that under the gateway model:

*AEMO would source CDR data that it does not already hold from data holders and act as a pipeline for the provision of that data to accredited data recipients. To the extent that AEMO is designated as a data holder for any of its own data holdings (for example, NMI standing data, and NEM interval metering data), it would not be acting as a gateway in the sharing of this data with accredited data recipients, and it would be subject to the CDR obligations imposed on data holders. These obligations are more extensive than the obligations that apply to designated gateways.*

*If AEMO is designated as a gateway for NEM data holdings, but not designated as a data holder, the gateway will be required to direct data requests to the relevant retailer(s) (or other entities designated as data holders, for example distributors), and*



*co-ordinate the CDR authorisation process. This may require a consumer to authorise the sharing of their data by more than one data holder, or it may be that a form of central authorisation could streamline this process. AEMO would then package the data from the data holder(s) and deliver the data to the accredited data recipient. To the extent that AEMO is designated as a data holder for any of its data holdings, this data could be delivered through the same transaction, but as noted above, AEMO would not be acting as a gateway in this context and would be subject to the CDR obligations that apply to data holders.<sup>11</sup>*

This paper provides our position to adopt the AEMO gateway data access model as described above for the reasons outlined in **sections 4.2 and 5**. We are eager for consumers to be able to use the CDR to share their data with trusted third parties as soon as is feasible. To do this, we look forward to working with stakeholders to determine the most appropriate authorisation and authentication models utilising the gateway, and the consequent interaction of the gateway with the ACCC Register.

**Figure 1** provides a high-level overview of the flows we envisage will occur once the AEMO gateway and accredited data recipients have been entered into and have obtained each other's details from the ACCC Register.

## 6. Next steps and interactions with other CDR work

We are working to ensure the implementation of the CDR in energy follows closely after implementation in the banking sector. Having now reached our position on the preferred data access model, we will continue to engage closely with stakeholders to implement the gateway so that consumers can realise the benefits of the CDR.

As noted in **section 5.1**, we will work to resolve a number of matters flowing from our position to adopt the gateway model. As an immediate next step, we will consider how best the gateway can contribute to the most appropriate authorisation and authentication models for the sharing of energy consumer data. For example, the gateway could be used to either conduct or co-ordinate the authentication and authorisation process, by providing a centralised platform that can be used for this purpose. That is, where more than one party holds the data that is being sought, the gateway could direct the consumer's current retailer to conduct the authentication and authorisation process, ensuring that the sharing of all relevant data is authorised through a single process.

We note the concerns raised by stakeholders in submissions and at the forum on data access models in March 2019 about ensuring appropriate models for authorisation and authentication are implemented.<sup>12</sup> As flagged at the forum, we will publicly consult on the proposed authorisation and authentication framework. We encourage interested parties to stay informed about this consultation process and other CDR work by subscribing to our CDR newsletter via the ACCC website.<sup>13</sup>

The adoption of the gateway model and subsequent decisions about appropriate authorisation and authentication models impact directly on our ongoing work in developing CDR rules, the Register and, more broadly, on the Treasury's consultation on data holders and priority data sets and the designation instrument itself. These work streams and their interactions with implementing the CDR for energy data sets are discussed in **sections 6.1 to 6.3**.

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<sup>11</sup> ACCC, *Consumer Data Right in Energy, Consultation paper: data access models for energy data*, pp. 26-27.

<sup>12</sup> ACCC, *Consumer Data Right in Energy, Data access models consultation forum*, Sydney, 18 March 2019, [www.accc.gov.au/system/files/CDR%20-%20Energy%20data%20access%20models%20-%20Forum%20summary%20-%2018%20March%202019.pdf](http://www.accc.gov.au/system/files/CDR%20-%20Energy%20data%20access%20models%20-%20Forum%20summary%20-%2018%20March%202019.pdf), p. 4.

<sup>13</sup> Please visit [www.accc.gov.au/media/subscriptions/consumer-data-right-updates](http://www.accc.gov.au/media/subscriptions/consumer-data-right-updates) to subscribe to the CDR newsletter.

On timing more generally, in supporting the Australian Government's intention to include energy data in the CDR, the COAG Energy Council's meeting communique of December 2018 noted the intention for this to commence for NEM priority data sets in the first half of 2020.<sup>14</sup> This timeframe was predicated on passage of the CDR legislation during the first half of 2019 and pre-dated changes to the implementation timetable for the banking sector announced by the Treasurer on 21 December 2018.<sup>15</sup> As the Treasury Laws Amendment (Consumer Data Right) Act 2019 received Royal Assent on 12 August 2019, consultation is required on the scope and content of the initial designation instrument, and our preferred data access model will necessitate some changes to NEM regulatory frameworks, we recognise that this timeframe is not achievable. We will work with the energy industry and AEMO on a range of issues, including IT readiness, prior to recommending a revised implementation timetable. We will release an energy CDR implementation timetable to stakeholders later in 2019.

## 6.1. Development of CDR rules

In March 2019, the ACCC published exposure draft rules for the CDR. The draft rules have been developed on the basis that rules will apply across sectors to the extent possible but with sector specific rules (and modifications to the general rules) included in Schedules to the rules. The exposure draft rules had a focus on their appropriateness for the banking sector, being the first sector for which the CDR is being rolled out. Consultation on the exposure draft rules closed on 10 May 2019. Stakeholder views are being taken into account in preparing the next draft of the rules, with a view to making the rules as soon as possible given the legislation has now commenced.

As part of the implementation process for the energy sector, we will conduct public consultation on amendments to the rules to extend the CDR to the energy sector. To feed into this consultation, we will undertake work over the coming months to identify the issues requiring energy-specific rules. This work includes determining appropriate authorisation and authentication models, and external dispute resolution mechanisms. Wherever possible, we will adopt an economy-wide approach to the rules, and this is likely to necessitate some changes to existing data transfer processes and protocols used in the NEM.

## 6.2. Development of ACCC Register

The Register will list the entities accredited to receive data under the CDR (accredited data recipients) and the entities that hold data within the scope of the CDR (data holders). It will be the source of truth for these entities to discover information about each other, so that data can be transferred from data holders to accredited data recipients. The Register is being developed for the commencement of the CDR, which enables banking data sets to be the first CDR data sets to be shared.

As with the CDR rules, the development of the Register will need to accommodate a gateway as the data access model for energy consumer data sets. Decisions on the authorisation and authentication models will also need to be considered in conjunction with the Data Standards Body. The ACCC will consult on developing the Register to deal with these issues.

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<sup>14</sup> COAG Energy Council, *Meeting Communique*, 19 December 2018, [coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/21st%20COAG%20Energy%20Council%20Communique.pdf](http://coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/21st%20COAG%20Energy%20Council%20Communique.pdf), p. 2.

<sup>15</sup> The Hon Josh Frydenberg MP, Treasurer of the Commonwealth of Australia, *Consumer Data Right Rules, Standards & Timeline*, media release, 21 December 2018, <http://jaf.ministers.treasury.gov.au/media-release/077-2018/>.

### 6.3. Treasury consultation on priority data sets and data holders

As flagged in **section 2.1**, the Treasury is currently undertaking work on the potential scope and content of the initial designation instrument for the energy sector. As part of this work, the Treasury will be consulting on the specific data sets and data holders that may be subject to the Treasurer's designation. Stemming from this consultation, the Treasury is also likely to consult on a draft designation instrument at a later date.