

Data Standards Body

Technical Working Group

Noting Paper – Energy Product Reference Data

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Context

The designation instrument for the energy sector defined the accountable data holder for energy Product Reference Data (PRD) to be the Australian Energy Regulator (AER) and the Victorian Department of Environment, Land, Water and Planning (DELWP).

The indicated purpose of this designation was to reduce implementation costs for energy retailers for the provision of PRD as energy retailers are already required to provide this data to AER and DELWP under existing regulatory arrangements.

The CDR technical standards have opted for an approach that obfuscates this variation from the model developed in the banking sector, where the banks were each designated to provide their own PRD. This approach was taken for a number of reasons including the following:

- It is expected that most future sectors will align more closely with the banking model than the energy model as an existing, central store of PRD is unusual across the Australian economy;
- It is likely that some data holders will span multiple sectors by providing both energy services and the services for other sectors such as telecommunications. In this scenario it may be preferable for the data holder to provide all their PRD data from the same source;
- Feedback from the energy retailers indicated they may prefer to serve this data themselves rather than rely on AER and DELWP despite the additional cost. This option was therefore accommodated in the CDR rules;
- AER and DELWP do not hold information about plans for Commercial and Industrial (C&I) customers and some energy retailers may wish to make these plans available for competitive reasons; and
- The CDR standards have a principle of cross sectoral alignment to reduce the implementation costs for all participants including the consumers of PRD data.

As a result of this variation for energy retailers the DSB has received feedback that the actual implementation requirements for CDR participants in the energy sector need to be clarified.

This document seeks to respond to this feedback by providing implementation guidance, noting that this document is not considered part of the CDR standards and should not be considered as a binding extension to the CDR standards.

Obligations

CDR Rules

The current [CDR Rules](#) outline a variety of obligations for participants in the energy sector. With regards to PRD the primary obligations fall on AER to provide a *Product Data Request Service* for all retailers by 1 October 2022 and for DELWP to augment this service by a date defined by the Minister (specified as the *tranche 1 (VA) date*).

In addition, the *initial retailers* (defined as AGL, Origin and Energy Australia) are required to implement their *Consumer Data Request Service* by 15 November 2022, excluding large customers, secondary holders and joint accounts. This includes the requirement to support status and outage APIs that must be published using the public base path provided to the Register.

Other retailers above the minimum threshold (defined as *larger retailers*) are required to deliver their *Consumer Data Request Service* by 1 November 2023.

Note that, while retailers are not required to provide a *Product Data Request Service* they are required to meet the technical requirements of the standards by their equivalent obligation dates and they are also required to provide information required to facilitate data requests to the Registrar on request.

CDR Standards

To achieve cross sectoral consistency and to allow for the varieties of optional models that can be adopted by energy retailers the technical standards required that PRD data is made available using the *PublicBaseUri* held by the CDR Register.

Technically, this means that energy retailers must provide a means to access the AER hosted *Product Data Request Service* via the *PublicBaseUri* that they nominate to the CDR Register when they go live with their *Consumer Data Request Service* implementation.

Energy retailers may prefer to provide this means of accessing the AER hosted *Product Data Request Service* ahead of their obligation to provide a *Consumer Data Request Service* implementation due to marketing and customer experience implications. The endpoints provided by AER will not be hosted under the domain name of the energy retailer and this may be seen as undesirable by the retailer.

As a result of these considerations the implication of the technical standards as they currently stand is that energy retailers must, at minimum, nominate to the CDR Register their brand details (as they see fit) and the *PublicBaseUri* that will be used to access their PRD information whether this is self-hosted or hosted by AER. The CDR Register can then make this information available to organisations that wish to consume the PRD data made available.

Implementation Implications

In light of the obligations and context outlined above, this section describes a series of suggested implementation patterns that can be used by energy retailers to meet their obligations under the CDR rules and standards.

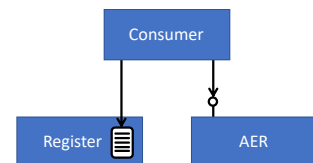
Implementation Patterns

Pattern 1: Direct to AER

Pattern Description:

In this pattern, the retailer uses the AER endpoint exposing their PRD information directly. They would contact AER to obtain the details of this endpoint and inform the CDR Register.

This pattern *does not* constitute self-hosting.



Applicability:

This pattern is applicable for any retailer until they expose their *Consumer Data Request Service*. Once a retailer is required to expose their *Consumer Data Request Service* this pattern will no longer be viable as the standards require that PRD, Status and Outage APIs are all exposed from the same base URI path.

Advantages:

- This is the simplest pattern to implement

Disadvantages:

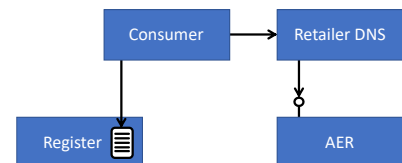
- This pattern means that the retailer PRD data is exposed on the AER domain rather than their own domain
- When a retailer goes live with their *Consumer Data Request Service* they will have to change the URI used to access their PRD data

Pattern 2: DNS Redirection

Pattern Description:

The retailer creates a CNAME entry in their DNS that redirects all queries to a retailer defined domain to the AER endpoint exposing their PRD data. The retailer would inform AER so that AER can prevent access from any other source and then provide the details of their domain to the CDR Register. The retailer will also need to provide AER with SSL certificates to allow for the valid use of the referring domain.

This pattern *does not* constitute self-hosting.



Applicability:

This pattern is applicable for any retailer until they expose their *Consumer Data Request Service*. Once a retailer is required to expose their *Consumer Data Request Service* this pattern will no longer be viable as the standards require that PRD, Status and Outage APIs are all exposed from the same base URI path.

Advantages:

- This is a relatively simple pattern for the retailer to implement with only DNS changes being required
- This pattern allows for the retailer to brand the URI used to access their PRD data
- When the retailer goes live with their *Consumer Data Request Service* they can continue to use the same domain providing consistency to data consumers (although the sub -path may change)

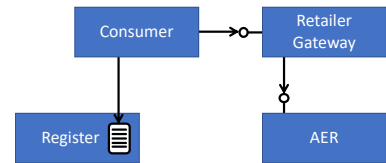
Disadvantages:

- This pattern would allow for the domain to be customised but not the path exposed by AER

Pattern 3: Proxy

Pattern Description:

In this pattern the retailer hosts the PRD API endpoints and then sends the requests to the AER without modification. The responses from AER are then forwarded on to the consumer by the retailer. The retailer would inform AER so that AER can prevent access from any other source and then provide the details of their domain to the CDR Register.



This pattern *does not* constitute self-hosting.

Applicability:

This pattern is applicable to any retailer

Advantages:

- This pattern allows for the retailer to brand the URI used to access their PRD data
- Allows for a path to be added to the base URI by the retailer as well as a custom domain
- When the retailer goes live with their *Consumer Data Request Service* they can continue to use the same URI providing consistency to data consumers
- Allows for all consumer access to be monitored by the retailer

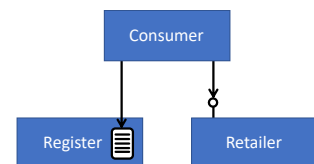
Disadvantages:

- While still relatively simple this pattern would require more implementation effort than the previous patterns

Pattern 4: Self-Hosted

Pattern Description:

Under this pattern the retailer voluntary becomes the data holder for their PRD data by fully implementing a *Product Data Request Service* and assuming the accountabilities inherent in offering that service. The retailer would inform AER so that AER can prevent access to the retailers PRD data from their system then provide the details of their domain to the CDR Register. This pattern *does* constitute self-hosting.



Applicability:

This pattern is applicable to any retailer

Advantages:

- This pattern allows for the retailer to brand the URI used to access their PRD data
- Provides full control to the retailer over the data presented (noting that plan data still needs to be provided to AER and DELWP outside of the CDR regime)
- Allows for all consumer access to be monitored by the retailer

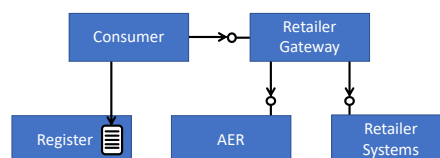
Disadvantages:

- This is a more complex pattern to implement
- The retailer would need to comply with the requirements for a *Product Data Request Service* under the rules and standards

Pattern 5: Hybrid

Pattern Description:

This pattern is the same as the Proxy pattern except the retailer intercepts the request and, for plans that the retailer wishes to offer that AER and DELWP do not support, augments the API responses with additional data in line with the Self-Hosted pattern. The retailer would inform AER so that AER can prevent access from any other source and then provide the details of their domain to the CDR Register.



This pattern *does* constitute self-hosting.

Applicability:

This pattern is applicable to any retailer

Advantages:

- This pattern allows for the retailer to brand the URI used to access their PRD data
- Allows for retailers to present C&I plans, as well as retail plans, to the market
- Allows for all consumer access to be monitored by the retailer

Disadvantages:

- This is a more complex pattern to implement
- The retailer would need to comply with the requirements for a *Product Data Request Service* under the rules and standards

Additional Considerations

Additional circumstances that retailers should take into consideration as outlined in the following sections.

White Labelling

There are circumstances where the way brands are defined by AER and DELWP may not align to the way the retailer wishes to communicate these brands to customers. For instance a single retailer may offer multiple master brands that appear to the market as separate retailers or may amalgamate multiple retailers under a single brand. In these circumstances the retailer may need to consider the Proxy, Self-Hosted or Hybrid patterns to be able to accommodate their specific go to market branding needs.

Registration

Currently the CDR Register only supports data holders registering their services once they are ready to expose their *Consumer Data Request Service*. The Registrar is currently working on a process to allow for the registration of PRD only but this will take time to define and develop. In the absence of such a process it is still expected that a retailer will inform the Registrar of their approach for the exposure of their PRD data by 1 October 2022.