

# Smart Meter Access Framework

Accelerating the adoption of decentralised renewable energy generation, demand response, and energy efficiency in Australia by actioning third-party access to smart meter data.

The energy crisis in Australia requires new methods of innovation to tackle policy uncertainty, uncompetitive electricity pricing in the NEM, and an increasing share of intermittent electricity generation.

We propose that a standard contract should be developed by a government body to ensure low-cost, consistent practise across industry, and strong protections for citizen data.

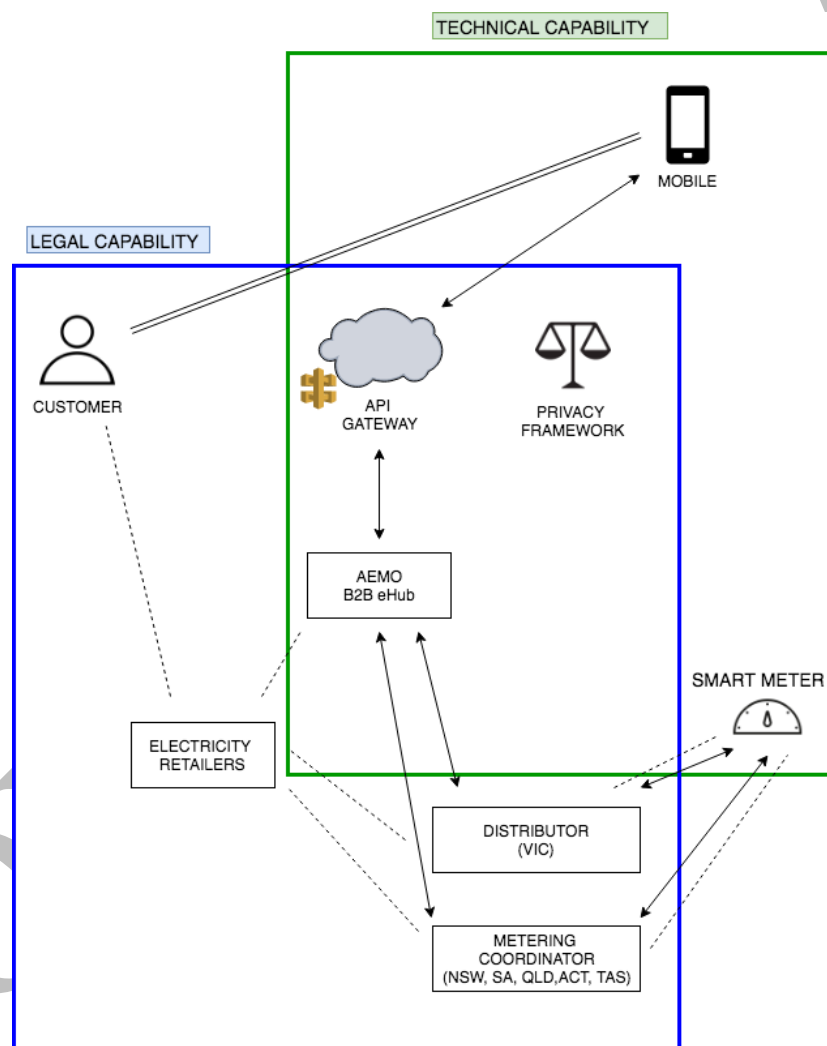


Figure 1: Project framework for smart meter data access using 2FA

Two Factor Authentication (2FA) to a telecommunications device is a standard security method employed by government agencies to verify the identity of an individual, a customer's telephone number is also a unique identifier for smart meter customers in the National Electricity Market.

A primary method of verifying the customer to enable sharing of smart meter data to a third party would be that a responsible party who holds the smart meter data (such as a distributor) sends out a text message or carries out an automated call to the customer providing a unique password, which can be entered into a

third-parties web-port and would then authorise the third-party to receive the smart meter data file over an API gateway.

An ideal scenario would be the instant processing of a customer data request (post-authentication), and in worst-case scenario processing of customer data requests daily.

We propose an API gateway to connect into AEMO’s newly created B2B eHub Platform, as the central coordination point for accreditation, consent, transaction processing, and auditing.

We propose NEM12 should be the standard meter file data format.

Despite the introduction of smart meters in Victoria, customers are not able to freely access their smart meter data or share it with a third party. It causes a range of inefficiencies such as not capturing the value of smart meter assets , choosing the wrong retail tariff, and incorrect sizing of solar power / battery storage energy systems.

With the above framework the following parties will realise additional value;

**Customers**

- Increased rights of access to smart meter data
- Insight into electricity spend to change behaviour
- Freedom to source various energy products from the free market
- Opportunity for retailer/distributor demand response
- Information availability for third-party innovations

**Distributors**

- Capitalise on regulated asset
- Shifting customers onto Time-Of-Use plans or demand charge plans
- Decreased costs for providing smart meter data to customers or third parties
- Increased network flexibility

**Governments**

- Providing their people with a financial opportunity to save money on their energy bills.
- Stimulate the economy by creating jobs and ecosystem for innovation
- Empowering people to meet government energy targets and international climate change targets

**Smart Meter Adoption in Australia**

	<b>Rollout</b>	<b>Who is responsible?</b>	<b>Who interfaces with the consumer</b>	<b>Privacy protection</b>	<b>data security</b>
<b>Victoria</b>	mandated	Distribution businesses	distributor	Federal Privacy Act 1988, ch 7 of NER (metering) and industry code	NER 7.8.2 ff (new NER 7.15) and industry code

<b>Australia NEM</b>	Market-led	Newly created metering coordinator, but potential access by a range of new parties	Retailer for small consumers	As Vic	As Vic
<b>Germany</b>	Mandated, but scaffolded approach depending on annual electricity use	Meter administrator (Last resort distributor, but can outsource)	Meter administrator (but retailer can provide combined service)	Lex specialis in new act and Federal Data Protection Act	Lex specialis in new act and Federal Data Protection Act

Figure 2: Current status of smart meter adoption in Australia and German comparison

Matthew Race  
 CEO  
 Ohm Power  
 0467 010 991  
[mrace@ohmpower.com.au](mailto:mrace@ohmpower.com.au)

Other areas to consider:

Providing ongoing daily access to smart meter data for third parties can lead to the creation of a demand response retailer, where third-parties can participate in demand-side provision of electricity completely independent of a customer's existing supply-side retailer, which would be reflective of a macro-economic trend of balancing both supply and demand in a 100% renewable energy grid.

Consulting with national start-up ecosystems with respect to energy market reform, as the rapidly changing global energy environment will benefit Australia with our large abundance of natural resources.