

Smart metering expenditure

Presentation to the Customer Forum

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Overview

- ▶ **Topic significance & objective of presentation**
- ▶ **How smart metering costs are forecast**
- ▶ **Current smart metering costs and charges**
- ▶ **Drivers of smart metering expenditure in the 2021-25 period**
- ▶ **Metering competition**
- ▶ **Next steps on this topic**

Topic significance and objective

▶ Topic significance

- › Smart metering forms part of regulated revenues (separate cap)
- › AusNet Services has proposed that metering be in scope of negotiation
- › Strategic importance to the future lower cost, optimised operation of the distribution network

▶ Objective of presentation

- › Inform the Customer Forum about how efficient smart metering expenditures are set by the AER and current cost levels
- › Provide information on the factors that will influence metering costs in the 2021-25 period
- › Highlight the value of smart metering to customers and how this may change in the event of introduction of competition in smart metering

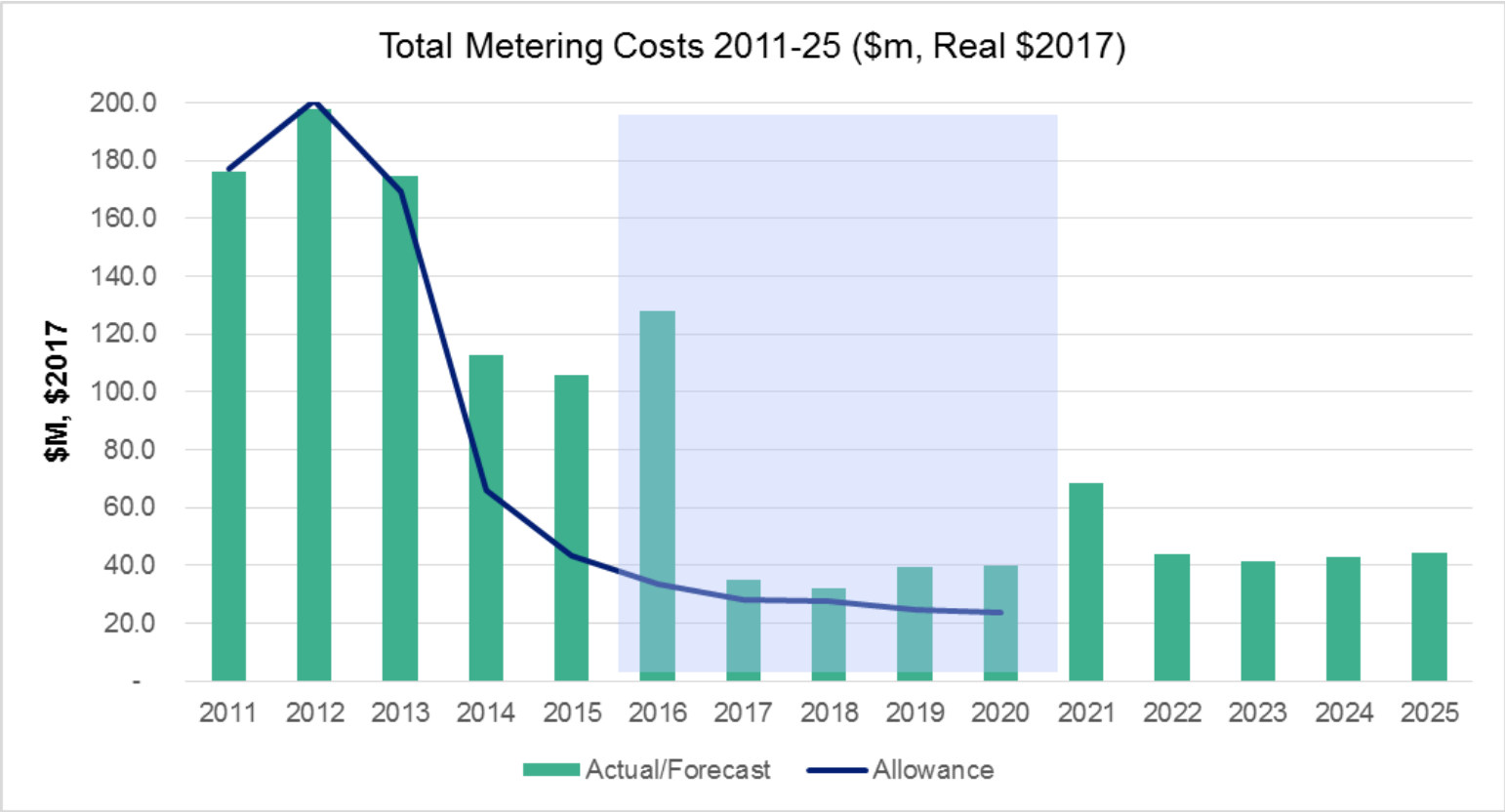
How smart metering costs are forecast and current period costs



Metering expenditure forecasting

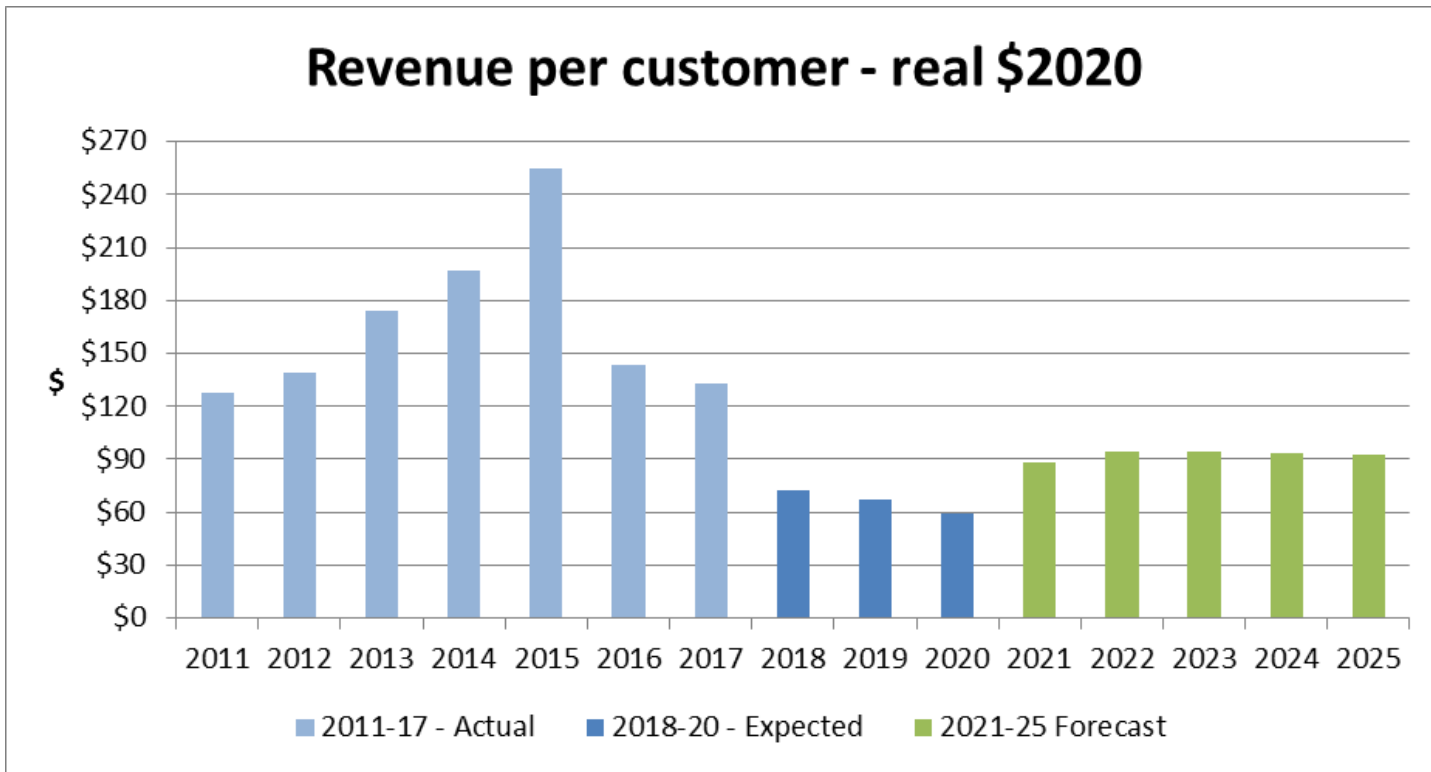
- › Regulated under a revenue cap
- › Building block model as per standard control services
- › Some assets/services are shared between the smart metering and distribution business (and hence some costs are shared)
 - Current period AMI IT and Comms opex cost sharing is 64% to smart metering / 36% to the distribution business (SCS)

Smart metering costs



Note: 2021-25 period is a placeholder forecast

Smart metering charges



Note: 2021-25 period is a placeholder forecast

Drivers in the 2021-25 period



Regulated Electricity Metering – 2021-2025 Outlook

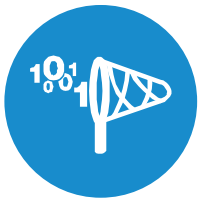


The outlook for Regulated Metering going into next EDPR period is uncertain and dynamic. We are assuming continuing exclusivity in Victoria.

Base costs provide a high level of service

Transition to 5 minute metering is driven by benefits to broader market (generators) rather than to the network

The Environment



Transition to 5 Minute Interval settlement (and metering)



The future of smart metering is unclear in Victoria beyond 2020



Customers are choosing Distributed Energy Resources (DER) – smart metering increasingly required to support network transition



WiMAX Obsolescence requiring transition



Telstra 3G to 4G transition

Metering competition



What is the case for metering contestability?



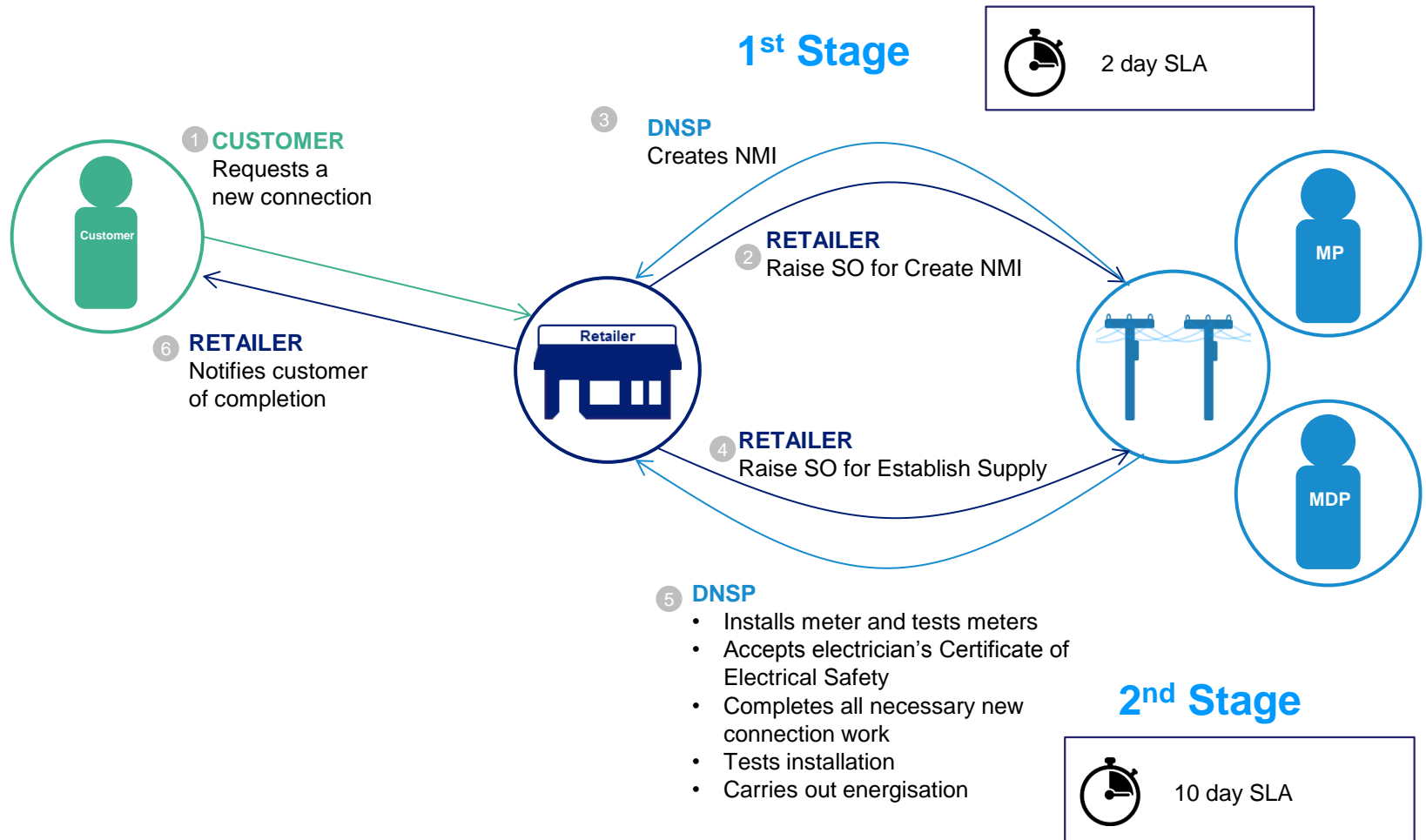
- ▶ **AEMC's Rule change in 2015 introduced expanded competition in metering provision**
 - › Only a small number of advanced meters had been deployed for small customers in the NEM outside of Victoria

- ▶ **AEMC commented that**
 - › Under a market-led approach to the deployment of advanced meters, consumers will drive the uptake of technology through their choice of products and services
 - › Competition in metering services will promote innovation and lead to investment in advanced meters that deliver the services valued by consumers at a price they are willing to pay

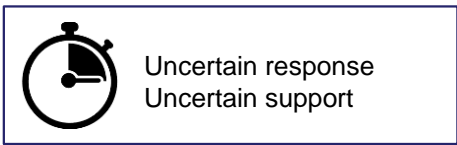
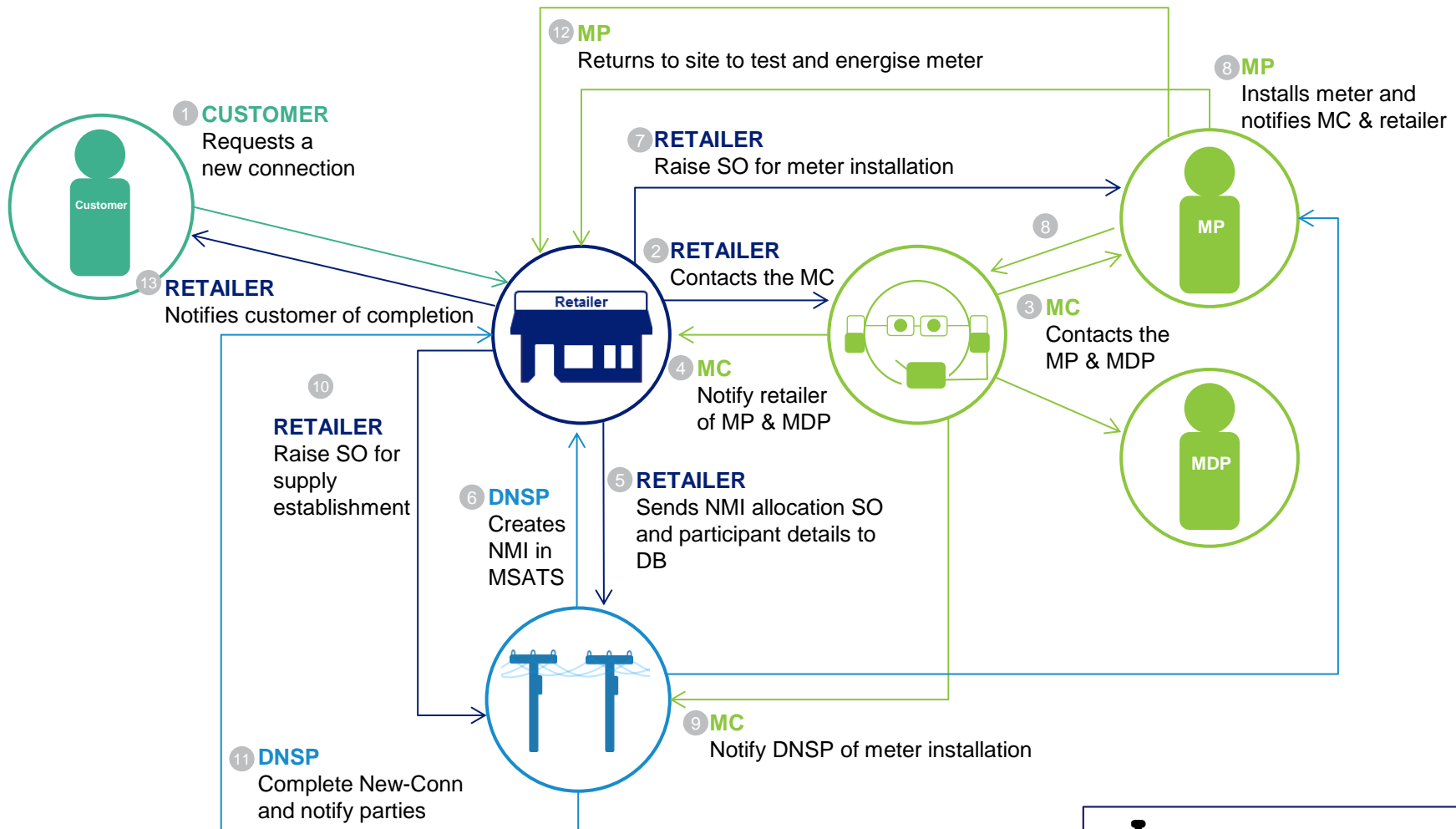
- ▶ **In Victoria, the Government mandated the smart meter rollout – so 100% take up was set by Government, not the market**

- ▶ **AEMC considered that a smooth transition to competition is likely to reduce costs for Victorian consumers**

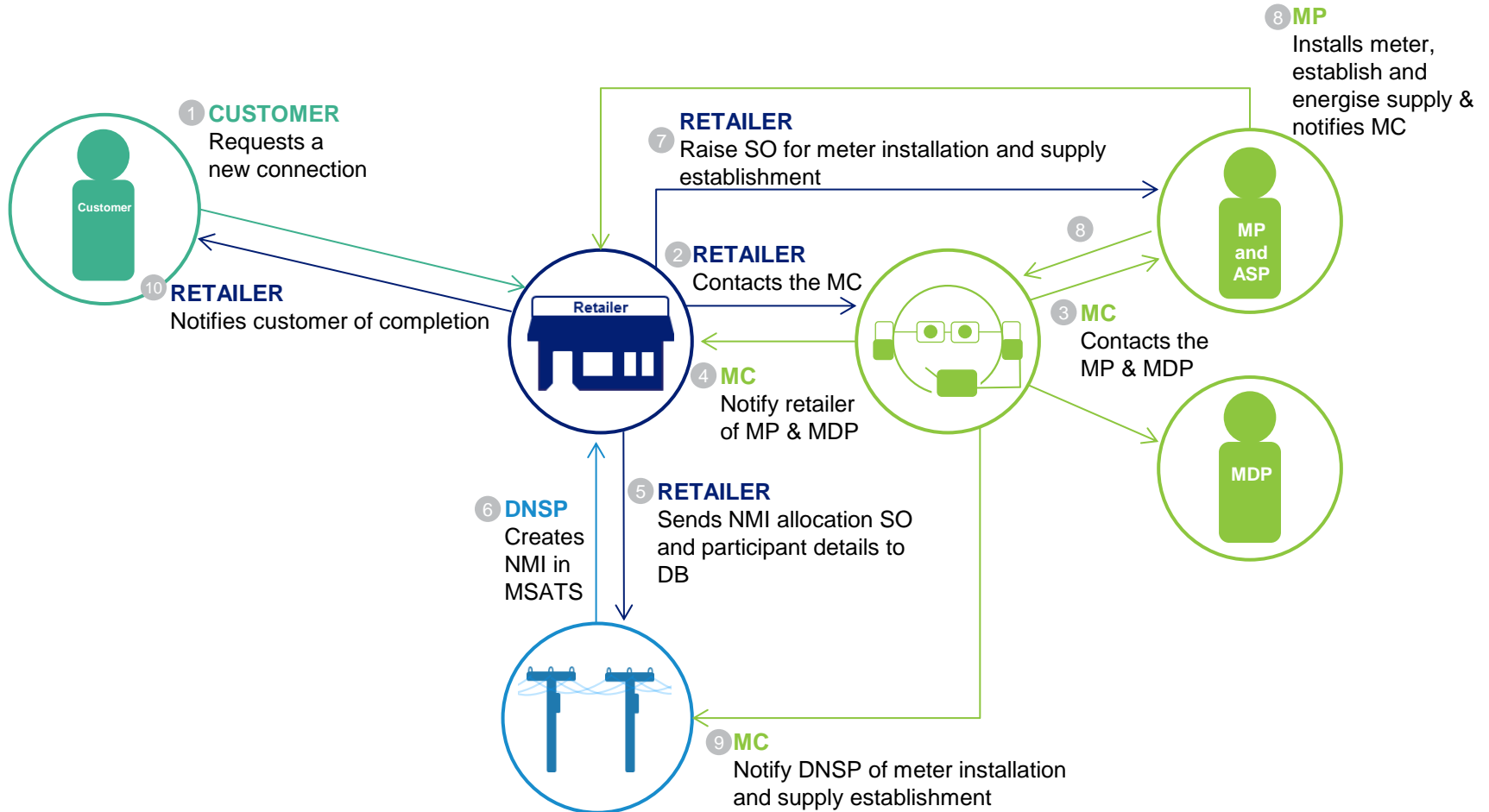
Current Victorian connection process




New connections – Metering contestability in QLD and SA



New connections – Metering contestability in NSW



 Uncertain response
Uncertain support

Value to customers of exclusivity

- › Victorian rollout has a higher service specification than the standard set for the competitive market

“In order to promote and encourage development and innovation under a competitive deployment of advanced meters, the requirements should be set at a level that minimises barriers to market entry.” AEMC, 2015

- › Victoria specification delivers an increased value to customers – which will be eroded or lost if lower national specification prevails
 - Load control - AMI meters directly manage “load control circuits” for hot water and pool pumps
 - Meter loss of supply and detection. This provides restoration crews with precise data on the location and extent of faults on the network
 - Quality of Supply events, for example under and over voltage. This information allows us to maintain balance and power quality.
 - Meter events. Including tamper detection, export energy etc – alerting us to events such as energy theft or solar faults
 - Optimising network expenditure using better information on current and emerging issues

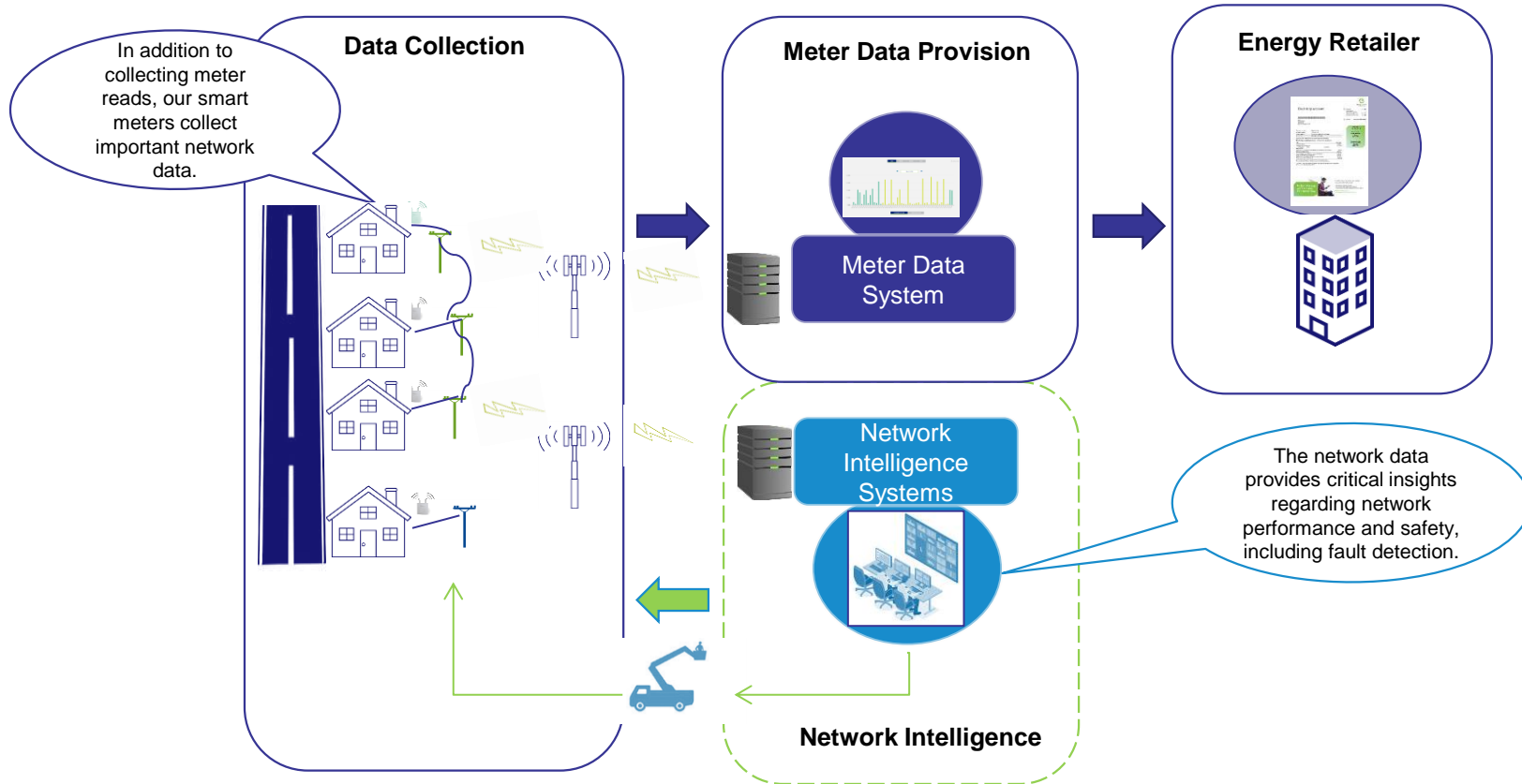
Swiss cheese effect

Data and control gaps may emerge if Victorian specification is undermined by a lower national metering specification

Customer service benefits depend on complete information, with no gaps



Leveraging our existing AMI Network



Adverse impact of competition...a recognised risk



- › AEMC recognised that distributors could purchase information and improved service levels from the Metering Coordinator...at a cost

“Throughout the consultation process DNSPs expressed concern about the potential for Metering Coordinators to exercise market power when dealing with DNSPs. Consumers will ultimately bear the consequences if a Metering Coordinator decides to exercise market power in its dealings with DNSPs.”
AEMC, 2015

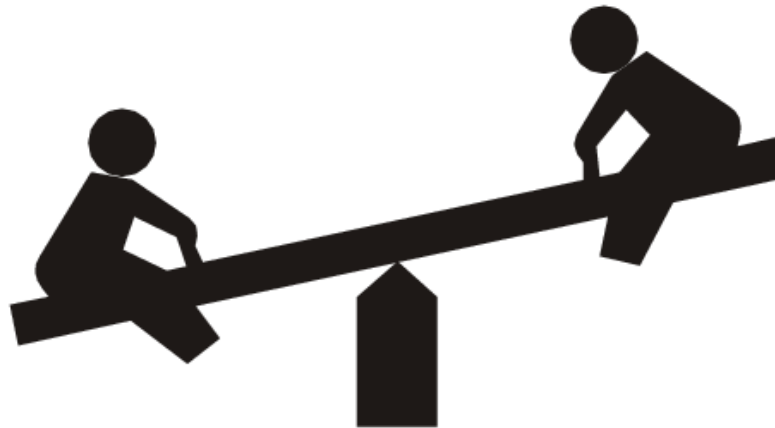
- › So, the Rules allow DBs to have network devices to maintain current performance:

“The final rule therefore allows the Victorian DNSPs to continue to use the meters they installed as part of the AML program as a network device, provided both the network device and the new meter can be accommodated within the metering facility, for example if they are unable to reach an agreement with Metering Coordinators to access equivalent services.”
AEMC, 2015

- › As exclusivity is still in place, these arrangements have not yet been tested or implemented....so their effectiveness is not known

Potential impacts of competition – lower costs for some?

Costs to distributors of purchasing data and replicating functionality will be higher



Lower direct metering costs for individual customers (for less functionality)

Longer term, if functionality and data cannot be purchased or replicated:

- network costs may be higher (loss of dynamic efficiencies) due to loss of information and control
- may adversely impact the development of intelligent networks of the future

Pro-competition...if it delivers efficient outcomes



- › The National Electricity Objective (NEO) in the Law is:
 - “The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to –*
 - (a) price, quality, safety, reliability, and security of supply of electricity; and*
 - (b) the reliability, safety and security of the national electricity system.”*
- › Competition is often (but not always) the means by which efficient outcomes are delivered....it may make sense in other States
- › In Victoria, competition will not deliver a more efficient outcome, consistent with NEO
- › Competition would lead to changes in meters and their functionality, require new commercial arrangements and processes to fill the gaps
- › Certain to deliver more complexity, will not deliver an overall improvement for customers

Questions and options for the Customer Forum to consider



Questions (draft)	Relevant customer research	Customer views
<p>Do the benefits of the Victorian specification smart meters provide value for money for customers over the 2021-25 period?</p> <p>- incl. load control, meter loss of supply and detection, quality of supply event, meter events such as theft or solar faults, optimising network expenditure, ability to develop intelligent networks of the future</p>	<p>Customer views on smart meters and the services that they provide have been tested in 2018 customer research.</p> <p>Q1 2018 results from the customer satisfaction survey will be made available to the Forum</p> <p>Customer views on reliability will be explored in the June Focus Groups</p>	<p>In-depth interviews (access to data): appetite to access their electricity data varied significantly across the sampled stakeholders, with most interest from large customers and Councils.</p> <p>Ethnographic study (smart meters and data): Few perceived smart meters to be helping them.</p> <p>Attitudes and perceptions survey (awareness of smart meters and benefits): around 1 in 10 residential & SME customer were not aware if they had a smart meter. SMEs were more likely to be using the benefits. Early adopters significantly more likely to be using direct load control and smart appliances.</p>
<p>Would metering contestability benefit Victorian customers?</p>	<p>See above</p>	<p>Research above explores valued services. Attitudes to contestability will be informed by this research – whether the valued services will still be available and at a similar or better price.</p>

Next steps on this topic

- ▶ **We will respond to feedback received today from the AER and the Customer Forum**
- ▶ **A more refined metering forecast will be presented for further discussion at the July meetings**