

Common Communication Standards

To support a competitive rollout of smart meters in the NEM

Dean van Gerrevink, Origin Energy (on behalf of the ERAA)

AEMC Framework for Open Access and Communications Standards Public Forum - 27 February 2014 Customers needs are changing and they are demanding energy solutions that reflect their lives

What Customers are saying



- Customer expect instant transparency on transactions
- They want user friendly information available at their convenience

Economic



- Increase cost of living
- No understanding of why energy bills increase
- Want to better manage their household budget

Technology



- Fast adoption of new technology
- They want information available on mobile devices

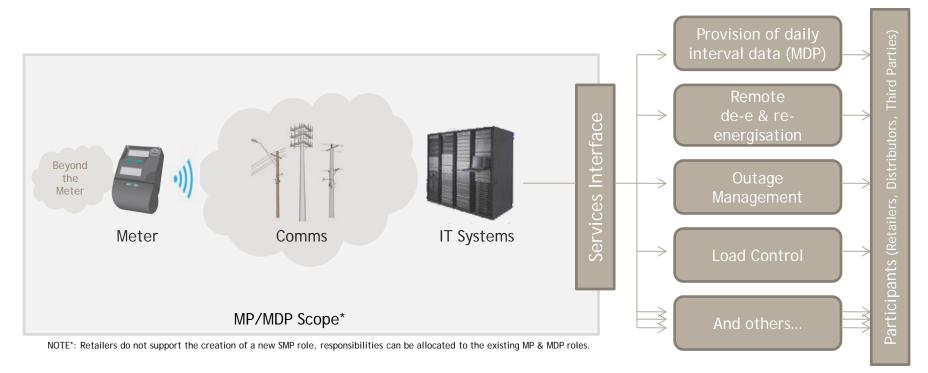
Customers tell us they want the information to better understand and control their electricity usage and costs

Smart meters enable timely visibility of consumption which is the first step towards giving customers control over their bills and consumption patterns



It's not about the meter... It's about the new "services" that are enabled





The end-end system must be managed

The meter provider must manage: -Installation of meters, -Operation of meters & comms network,

-Ongoing maintenance (firmware upgrades), -Maintain security of the end-end system, -Provide access to authorised participants, -Manage contention for resources, and congestion management.

Technology evolves over time

The Smart Meter Provider should be free to choose & evolve the technology to provide the most efficient means of delivering the required services to market.

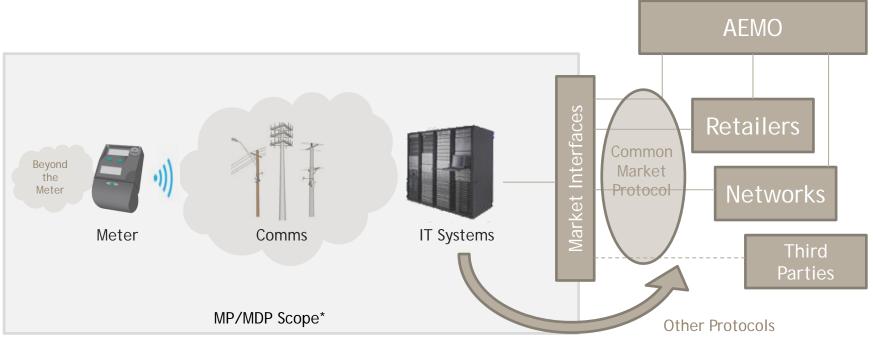
The market for competitive metering services will choose <u>open international</u> <u>standards</u> at the appropriate time if they are the most efficient outcome.

Focus on services

Services enable participants to be shielded from the technical details of operating and managing the meters.

Most market participants do not have expertise in metering or metering protocols. They are focussed on the data and services they require to serve their customers. New Services enabled by Smart Meters can be delivered using a Common Market Protocol at the interfaces between participants





NOTE*: Retailers do not support the creation of a new SMP role, responsibilities can be allocated to the existing MP & MDP roles.

Participants don't need to talk to meters

With a focus on services, it is desirable to have a framework that does not require direct communication with the meter for any party other than the meter provider.

As such it is not necessary to have a common meter protocol. Regulating a common meter protocol will limit choice, and add cost. A common meter protocol may emerge over time if a particular standard offers the most efficient outcome for the market.

Common Market Protocol is required

A common market protocol will be established for common services that are used by all participants.

The common market protocol will ensure efficient customer switching and avoid barriers to churn.

Common market protocols provide efficiencies for market participants to avoid a mesh of disparate IT systems.

Other Protocols are possible

Participants may also work bilaterally with their Smart Meter Provider to deliver innovative new services using other non-market protocols, or different points of access.

It is also envisaged that new services could be communicated via optional extensions to the Common Market Protocol.

4

As an industry, we have an existing governance model that can be leveraged to manage the Common Market Protocol required to support the competitive rollout of smart meters



- We propose that the Common Market Protocol can be governed as <u>B2B Procedures</u>.
- We have existing market protocols in place that can be leveraged. E.g.
 - NEM12 Data Exchange for daily interval data (MDP obligations),
 - B2B Services orders for remote connection & disconnection,
 - Smart Meters are operating in Victoria using existing market protocols.
- New Services can be delivered using extensions to existing protocols or as new protocols.
- A new protocol is likely required for the new real-time services enabled by smart meters.
- New Services (and the appropriate protocol/s to deliver those services) will be defined collaboratively by industry participants via the <u>IEC</u> processes.
- The IEC governance model is being reviewed to ensure participation from a broader set of stakeholders.
- The delivery, operation and maintenance of the market protocols will continue to be provided by <u>AEMO</u>.
- New protocols are likely to be based on web services, and may be based on international standards such as IEC CIM 61968-9 (Common Information Model) if industry deem that they meet the requirements of our market.





......