



AEMC

INFORMATION

Shared market protocol – Fact sheet

The review on a framework for open access and common communication standards recommended, among other things, that a ‘shared market protocol’ be adopted for smart meter communications. This fact sheet explains the shared market protocol and related concepts. A separate information sheet provides an overall summary of the review, recommendations, and implementation plan.

Communication standards – market and meter protocols

Communication standards define the ‘language’, or the set of rules or instructions, that is used to transmit messages between the systems of different parties. We have considered two types of communication standards – meter protocols and market protocols.

- Meter protocols define the interface standards between the applications in a smart meter and the smart meter communication network.
- Market protocols define the interface standards between the parties seeking access to the smart meter functionality and the parties managing the access (the ‘gate keeper’).

Gate keeper

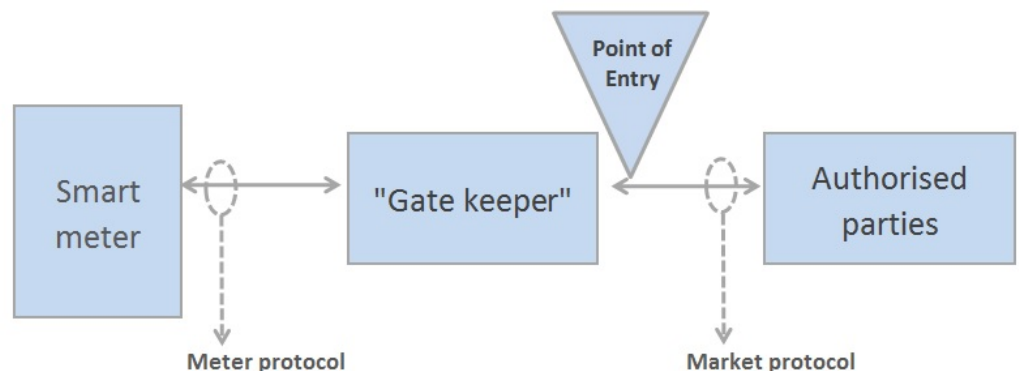
Under the National Electricity Rules (NER), there are existing provisions for the management of access to, security and congestion at meters. However, for smart meters, this management task would require expertise beyond what is currently envisaged due to the multiple parties, requiring differing levels of access, who would be accessing smart meters. For the purpose of analysis, we have identified the party that would be undertaking this role for smart meters as the ‘gate keeper’. The gate keeper role will be defined under the competition in metering rule change request that the Standing Council of Energy and Resources (SCER) has submitted to the AEMC.

Authorised party

Different parties including retailers, distributors and other service providers may want access to smart meter functionality. For the purpose of our considerations, we have characterised these parties as ‘authorised parties’.

Point of entry

The point of entry is where an authorised party’s access to a smart meter’s functionality is controlled or restricted. There may be more than one point of entry to a smart meter and the functionality it supports.



The shared market protocol will be based on extending the current B2B systems

Shared market protocol

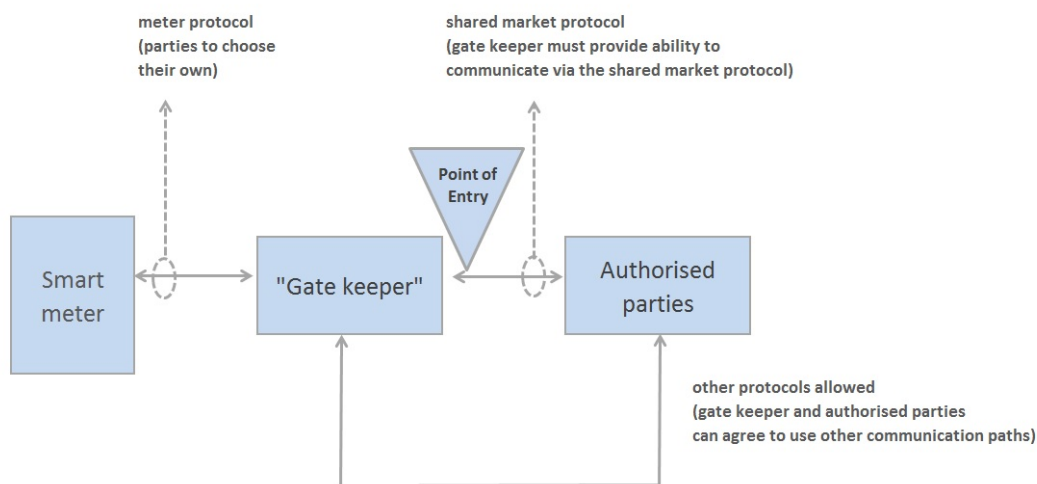
We have recommended that a 'shared market protocol' be adopted. The shared market protocol would define a standard for communications between the gate keepers and authorised parties.

The shared market protocol is recommended to be based on extending the current arrangements for the business-to-business (B2B) systems provided by the Australian Energy Market Operator (AEMO). This would allow a 'service-based' shared market protocol to be developed as the current B2B systems are service-based. Other international standards were not considered suitable as a basis for the shared market protocol as they are 'function-based'. Service providers and consumers are ultimately interested in the services enabled by a smart meter's functions rather than the functions themselves. (For example, a service would be the ability to remotely control an appliance and the function would be 'load management through a controlled load contactor or relay'.)

Gate keeper to provide the ability to communicate via the shared market protocol

Our recommendation is that gate keepers must always provide the ability to communicate via the shared market protocol for 'agreed metering services' (explained further below).

Given this, the shared market protocol would essentially be a 'default' protocol. However, where parties agree, other market protocols may be used.



Agreed metering services

The agreed metering services that must be supported by the shared market protocol should be defined. We have recommended that they be defined in relation to the services enabled by the functions in the 'functionality specification'. The competition in metering rule change request proposes that AEMO establish, maintain and publish a smart meter minimum functionality specification including an explanation or specification of those functions and related performance levels in the form of a procedure or guideline. Further consideration of the link between agreed metering services and the functionality specification will be undertaken following the final determination on the competition in metering rule change. (Further information on the implementation requirements are outlined in the final report information sheet.)

For information contact:
 AEMC Senior Director, **Ann Whitfield** (02) 8296 7800
 AEMC Senior Adviser, **Anita Lai** (02) 8296 7800

Media: Communication Manager, Prudence Anderson 0404 821 935 or (02) 8296 7817

10 April 2014