



Australian Energy Market Commission  
Level 5  
201 Elizabeth Street  
Sydney NSW 2000

30<sup>th</sup> January, 2014

To whom it may concern

**RE: Project Number EMO0028 - Framework for Open Access and Common Communication Standards Review.**

Secure extends its thanks for the opportunity to provide a response to the AEMC's Framework for Open Access and Common Communication Standards Review as released on the 19<sup>th</sup> December 2013. We have constrained our commentary to the areas of our expertise, namely, metering specification and access models that will help support innovation and ultimately DSP adoption and support.

Secure Australasia through its parent company Secure Meters Limited are a global leader in the development and manufacture of Smart Meters and associated Energy Monitoring and Automation equipment. Working across the major regions of Asia, Europe and Australia Secure has more than 30 years experience in this domain starting with the first AMI smart meter designed in the 1970's. More recently Secure is a lead supplier of AMI meters to the Victorian AMI program having delivered over 1,300,000 AMI meters to 4 of the 5 distribution businesses.

#### Areas for comment

##### **"5.3.4 Areas for comment**

**We are seeking stakeholder views on the appropriate selections of a common market protocol. In particular: We are seeking stakeholder views on the appropriate selections of a common market protocol. In particular:**

- should an internationally accepted meter protocol form the foundation of the NEM common market protocol?"**

**[Response]:** It is Secure's view that a meter protocol should not be used as the foundation of a **market protocol**. As referenced in the report itself the market proper is generally interested in the business services that a meter provides as opposed to its discreet, low level functions. A business service, for example, can in fact be made up of several meter transactions and as such presenting this complexity to the market would put an unnecessary burden on all B2B services. This complexity

is better retained at, for example, the SMP/MDP level. Further when it comes to Enterprise integration our industry, and industry generally, is very familiar with Service Oriented Architecture (SOA) and to introduce the peculiarities of metering at B2B level will only seek to increase complexity and stifle adoption.

**“ is DLMS/COSEM sufficiently well developed to be used as the foundation for a market protocol, given the potentially synergies that exist with smart grid interoperability and other meter standards?”**

**[Response]:** DLMS/COSEM is certainly a mature and well developed meter protocol, however, as articulated above it is, in Secure’s view, not the right choice for a market protocol. An SOA is much better suited for ease of adoption by the market, and more importantly, is extensible by nature and more easily modified to accommodate new functionality. This layered approach, of separating metering and market protocols allows each to be specified and implemented from the appropriate context.

**“ would the costs of developing an Australian specific services based common market protocol be likely to deliver sufficient benefits compared to using an internationally accepted metering protocol?”**

**[Response]:** By adopting a metering protocol, internationally accepted or not, is likely to be a more costly exercise for the market generally as it necessitates most market participants needing to deal with the complexities of discreet metering functions. Conversely, as proposed, the use of a service based market protocol, ensures this complexity is centralized at the SMP/MDP level, thus resulting in a lower cost integration model that would readily fit into existing enterprise architecture.

**“ would extensions to the B2B gateway present a viable option for the development of a services based common market protocol?”**

**[Response]:** Extensions to the existing B2B gateway certainly present a viable option for the implementation of a services based market protocol. It is Secure’s view, that to avoid stifling innovation such extension should serve to cover basic functionality only thus allowing the market to innovate and differentiate – a fundamental goal of the Power of Choice. It is imperative that such innovation does not require, at least initially, updates to market rules and protocols.

#### **“5.4.1 Entity responsible for maintaining the common market protocol**

**We are seeking stakeholder views on the appropriate entity to maintain the documentation for a common market protocol. In particular:**

**· would AEMO be the most appropriate entity to develop and maintain the common market protocol?”**

**[Response]:** As the market operator, AEMO or one of its established committees would be appropriate to manage the implementation and maintenance of the common market protocol. The

goal of the market protocol is to provide all market entrants a common open enterprise interface to allow efficient market participation and encourage competition

**“. is there the potential for the responsible entity to adversely impact on the competitive provision of DSP and related services?”**

**[Response]:** Yes, there is potential for the responsible body to adversely impact the competitive provision of DSP and indeed stifle innovation depending on how the role is fulfilled, too strong a hand could prevent or severely hamper future change and adaption's to technology advancements. This can be avoided by facilitation of the role through an AEMO established committee comprised of a diverse group of senior market participants and broader consultation with all market and industry contributors. It will be important to establish a framework where a defined core service interface is maintained but yet still facilitate change management to allow future improvements and innovative new services to be introduced in a controlled but timely manner for those participants that wish to embrace them.

**“. would AEMO be regarded as sufficiently neutral, should the common market protocol be based on the existing B2B arrangements, as the B2B procedures are maintained by the Information Exchange Committee, established by AEMO?”**

**[Response]:** As previously mentioned, AEMO is the market operator and the intent of the market protocol is to provide all market entrants a common open enterprise interface to allow efficient market participation and facilitate competitive provision of DSP and related services. Consequently, it is appropriate that either AEMO or one of its established committees would manage the implementation and maintenance of the common market protocol. AEMO, Information Exchange Committee, market and industry consultation will be sufficient to ensure neutrality is maintained.

#### **“5.4.2 Adding new functions to the common market protocol**

**We are seeking stakeholder's views on whether the accredited parties and MPs should be required to define new functions in the smart meter functionality specification before they can be implemented. In particular:**

**. would requiring new functions to be fully documented before they are used stifle innovation and reduce competition in the provision of DSP and related services?”**

**[Response]:** Yes, almost certainly. A key objective of the Power of Choice is to promote contestability through innovation and differentiation. Were a regulatory model to be implemented that required agreement and updating of specification, prior to any implementation, this would by definition, significantly impede innovation and limit differentiation and therefore competition. Rather, as articulated previously, any specification should cover minimum functionality requirements and thus allow the whole supply chain to innovate and thereby provide competing offers.

As a further impediment, where certain functionality may be proprietary or registered under Patent, it would potentially prevent its incorporation into the specification.

**“. would not requiring new function to be documented be likely to lead to reduced levels of**

**interoperability, and hence reduce competition in the provision of DSP and related services in the longer term?”**

**[Response]:** It is Secure’s view that this would not be the case. Interoperability would be served through the introduction of minimum functionality requirements both at a market level and metrology level (I.e. SMI 1.3.). New functions however must be allowed to encourage service innovation and the competitive offering that the Power of Choice demands. Certainly mechanisms should be implemented to allow adoption of new functionality into the market protocol but this should not be a prerequisite for implementation.

#### **“5.5 Common meter protocol**

**We are seeking stakeholder’s views on whether a common meter protocol should be adopted, or whether SMPs should be able to use protocol translators. In particular:**

**· should there be a common meter protocol?”**

**[Response]:** Although not essential, a common meter protocol has advantages in particular when establishing an open and competitive market environment. Protocol translators can deliver the same outcome but add a layer of complexity which could hinder new market entrants. Secure would therefore recommend a common meter protocol is adopted moving forward although provision to use a protocol translator as an alternative should not be prohibited and would in fact be beneficial in support of the existing Victorian deployment.

**“· if a common meter protocol is required, should it use the internationally accepted DLMS/COSEM protocol as its foundation?”**

**[Response]:** Yes. DLMS/COSEM (IEC62056) is the most widely adopted protocol within the international market of IEC based metering products and covers AMI applications with allowances for easy integration of vendor or market specific variations. As mentioned in the report, Standards Australia has an existing close relationship with and is widely harmonised with IEC which makes IEC62056 the most appropriate foundation for Australian adoption rather than alternative standards used in markets less similar to Australia. It should be noted that the Standards Australia working group El11 for metering standards is no longer active.

**“· if a common meter protocol is required, should existing Victorian smart meter operators be required to offer a protocol translation to the new common meter protocol?”**

**[Response]:** Not necessarily. This depends on how long the derogation of metering contestability is maintained in Victoria. Until metering becomes fully contestable, the Victorian smart meter operators only need implement the recommended common market protocol services interface. This will allow all other participants of the competitive market environment to interface to the existing Victorian AMI deployment. Once the derogation is ultimately lifted, the Victorian smart meter operators could provide protocol translators or simply provide unhindered access through the market interface. This is a further endorsement of Secure’s recommendation to implement independent meter and market

protocols as a common meter and market protocol may not be viable for the existing Victorian deployment.

**“ without a common meter protocol do proprietary meter protocols (and protocol translations) be more likely to support competition in DSP and related services?”**

**[Response]:** Proprietary meter protocols and protocol translations would still support competition in DSP and related services as any additional complexity would be limited to the SMP level. The common market protocol would ensure that all other market participants are isolated from any inconsistencies or idiosyncrasies of individual meter protocols. If compared to a common combined meter and market protocol approach then protocol translations would facilitate much greater competition in DSP and related services as a prescribed combined protocol would seriously hinder and potentially prevent innovation in features and market offerings. Notwithstanding this, Secure still recommends a common meter protocol based on DLSP/COSEM as this has provision for easy vendor and market specific adaptation to facilitate innovation.

#### **“5.6.3 Market point of entry – single common meter protocol**

**We are seeking stakeholder’s views on whether the protocols at the meter point of entry and the market point of entry support access to new functionality without the need to make any modifications to the SMP software.”**

**[Response]:** It is likely true that a common meter and market protocol would allow new functionality to be adopted without modification to SMP software however this serves to do little than move complex modifications on to upstream systems and participants. Where independent meter and market protocols are used, indeed SMP’s would need to implement such changes within their systems, however this process consolidates the most complex of these changes at this layer. New functions, as presented at the market entry layer, can be adopted through more standardized and accepted SOA models. In fact this approach gives more creditability to the concept of an SMP as a new market participant.

#### **“5.6.4 Proposed smart meter communication architecture**

**We are seeking stakeholder’s views on the proposed architectures above. In particular, should the proposed architecture of:**

- a protocol translation at the point of entry (Figure 5.1) be supported in the NEM?”**

**[Response]:** Yes. As previously mentioned, although Secure recommends a common meter protocol moving forward, protocol translation should be supported at least to allow interface to the existing Victorian AMI systems. As long as the market protocol remains independent there is ostensibly no benefit it prohibiting protocol translation and doing so could potentially prevent future innovation at the meter or SMP levels.

**“. a common meter and market protocol (Figure 5.2) be supported in the NEM?”**

**[Response]:** As articulated previously, it is Secure’s view that a common meter and market protocol should not be supported in the NEM. The bulk or market participants are generally interested in the business services that a meter provides as opposed to its discreet, low level functions. Metering complexity is better retained at, for example, the SMP/MDP level and in turn a SOA based market protocol implemented.

**“. the proposed protocol that allows communication via either the meter protocol or the market protocol (Figure 5.3) be supported in the NEM?”**

**[Response]:** Whilst Secure is in full support of a market protocol in favour of a combined meter/market protocol, the ability to effectively provide a tunnel to the meter may prove beneficial. Specifically, we believe this should not be prohibited under any proposed arrangements, but nor should it be specifically required; rather it is a provision for alternate approaches in the future. It should be noted that a direct tunnel through to the meter may effectively bypass security, access and congestion processes that reside across the layers of the system (head-end, modem etc.)

#### **“5.7 Allocation of the SMP role**

**We are seeking comment on whether the SMP’s responsibilities should be retained in a separate role, or whether these responsibilities should be assigned to an existing entity.”**

**[Response]:** Secure believes that the market would be best served by retaining this service under an independent role. Doing so would not prevent a new or existing market participant from operating a business with multiple AEMO accreditations but rather would provide the opportunity for new entrants to provide innovative solutions thus enhancing product and service offering to the market in general.

Finally Secure would again to like thank the AEMC for the opportunity to comment on its draft report and are happy to provide any further information as required.

Yours sincerely

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Secure Australasia Pty. Ltd.