# Implementation of Shared Market Protocol

## EDMI Response to AEMC Consultation Paper

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## 1    Introduction

EDMI is pleased to be able to respond to the Australian Energy Market Commission's (AEMC) Consultation paper seeking submissions on the *implementation of a shared market protocol that will provide a standard form of communication between parties wishing to seek access to the services provided by advanced metering infrastructure*.

EDMI continues to appreciate the work and supports the policy direction of the AEMC related to the Power of Choice review, Minimum Services Specification, Shared Market Protocol and other efforts to bring greater choice to the electricity market and encourage innovation.

EDMI believes that services built on advanced smart metering and indeed the advanced smart metering itself should be contestable. Any service provision to a customer needs to be based on providing value to the customer, and needs to allow for the service provider to innovate and invest to extend and develop these and other services.

EDMI agrees with AEMC's efforts to open the market to new players, but more specifically is absolute in its support of the commission's aim to achieve this outcome without restricting new services innovation.

Answers to the specific questions are included. EDMI would welcome the opportunity to discuss our submission in more detail.

## 2    Shared Market Messaging

In reviewing the consultation paper, EDMI believes that it would be prudent to draw a distinction between a protocol and messaging that might form part of any number of different protocols.

Put simply, a protocol is a standard procedure for regulating data transmission between computers.  This includes both the format and required content of the message as well as the platform or carrier of that message.

EDMI believes that, just as it is more accurate to use the term "Shared" rather than "Common", it is also more accurate to use the term "messaging" rather than protocol.  Defining shared market messages, but allowing users to make use of any standard protocol reduces compliance costs and increases the capacity for systems innovation.  Possibly most importantly, it also allows for the system to adapt to new security requirements quickly and efficiently.  And it does this without reducing the capacity of the shared market system to deliver an accessible and open shared data communications model.

EDMI's experience internationally of the introduction of protocols, where the framing has been defined, is that it either results in a protocol that is hard to define and can be limited by different interpretations (DLMS), or which is complete and standard, but rigid and very expensive (UK SMETS).

EDMI believes that, rather than a "Shared Market Protocol", we should be discussing "Shared Market Messaging".

## 3   Governance (Box 3.1)

What are the advantages and disadvantages of the different governance models?

As discussed in the consultation paper, AEMC has identified two governance models for the shared market protocol. The first involves governance by an expanded or amended IEC group under the NER; the second involves AEMO making decisions about the operation and administration of the protocol.

While EDMI recognises the stability that is represented by continuing with an "updated" version of the current B2B arrangements through an expansion of the IEC, EDMI does not agree that there is an advantage over other governance models in terms of industry knowledge. The alternative model –the AEMO consultative approach– is also capable of accessing this knowledge.

Indeed, when considered in light of the aim of the shared market protocol and industry rule changes related to smart metering, the capacity of the amended IEC approach falls short. The specific aim of current work is to introduce new players and new services and a body with a pre-set membership list is necessarily limited in the new knowledge it can provide. In saying this, EDMI is not disputing the undoubted knowledge and value that existing players supply, simply recognising that dynamic change requires a dynamic regulatory model.

For similar reasons, EDMI also believe that the AEMO consultative model provides a more complete coverage of the market, existing and future. By allowing for consultative-based discussion, AEMO is better-placed to assess the whole-of-market benefit of any proposal. In making this submission, EDMI submits that the best consideration is between market players as a group and industry-wide investment and costs. It is in all our interests to have a vibrant and efficient energy market.

EDMI submits that the AEMO consultative approach to governance will deliver better outcomes in the emerging market. It allows a more flexible approach to discussions from the start and is more able to be accommodating of new ideas, services and members. At a time when rule changes and market developments are focused on introducing competitive players and promoting innovation, any proposed governance model should have the capacity to adapt quickly.

In June 2013, AEMO submitted a rule change request to the AEMC that would make AEMO the governing body for the B2B procedures and this was turned down because AEMC was not satisfied that the proposal would better promote the NEO than the existing arrangements at the time. As of today, it is clear that, even if market arrangements have not changed significantly now (and they have), they will certainly change in the near future. As a result, EDMI now believes that the time is ripe for AEMC to reconsider a similar question and move towards an AEMO consultative governance approach.

## Could the challenges around membership and voting for an industry led model be addressed? If so, how?

In moving towards an AEMO consultative approach, perhaps the best reason for doing so, and a significant disadvantage in an approach that is built on the existing IEC or a similar body, is the question of membership and voting.

Issues of who has a seat and who has a say, and indeed how much of a seat and how much of a say are implicit in any body that is formed directly from industry. While it may be possible to settle these questions for an initial grouping, the process would come with time and resources costs (regulatory supervision and review, time cost of submissions and negotiations, etc.). Further, since the aim of rule changes and new regulation is to open the market and provide new services, the process of assessing membership and voting rights would remain ongoing or require regular revisits.

There remain other issues to consider too, such as "what happens if a market participant fails?" or "if company X loses market share, will a reduction in representation mean we lose the valuable knowledge gained from the participant?".

EDMI submits that the AEMO consultative approach is not only better able to address all these issues, but by its nature, avoids many of them completely. Further, by moving towards a consensus of experts, rather than a vote, AEMO is better able to consider whole-of-industry benefits.

## Are there any other issues or factors relevant to considering an appropriate governance model?

EDMI recommends that, should the governance be place in the hands of AEMO, the resultant committee continue to seek input from network engineers with advanced independent knowledge of network messaging and security.

Are there any other governance models that could be appropriate for the shared market protocol?

EDMI believes that consultative approach suggested in the discussion paper represents the best way forward at this time.  However, in a changing market place and in the future, it may be necessary to adapt to new requirements and perhaps new models.

This requirement to adapt is another recommendation for the AEMO consultative approach, as it will be easier to move from the full-market discussion to another governance response.

## 4    Objectives and Principles (Box 3.2)

Should implementation of a shared market protocol include the development of an objective or principles for governance?

If yes, what objectives or principles should be included?

If the governing body is AEMO, should there be any objectives or principles in addition to the NEO?

EDMI believes that set objectives and principles for governance will help build a more efficient and stable model.

Any regulatory enterprise is bound over time to inevitably expand into related or connected areas.  To avoid this, EDMI recommends setting clear scope guidelines to contain shared messaging in the market and binding these guidelines under a set of objectives and principles. For example, different messaging protocols from the meter (e.g. DLMS) add significantly to the code space required, without driving any tangible benefit.

By limiting the scope of any governance model in this way, AEMO can deliver more efficient outcomes by setting a tightly focused agenda.  Such targeted control will also give the industry confidence that the end-to-end communications environment will remain stable and encourage innovation around the shared scheme.

## 5    Minimum specification interactions (Box 4.1)

Should the shared market protocol be required to provide for (as a minimum) the services that are listed in the minimum specification?

Should the shared market protocol also include other common services that are not mandatory under the minimum specification?

EDMI believes that there should be a shared messaging system that is required to provide for (as a minimum) the services listed in the minimum services specification.

By defining shared messaging, rather than also defining the "framing", it will also be possible to include other common services that are not mandatory under the minimum services specification without restricting other development.  Indeed, where security is an issue, it may be necessary to use other "framing" for certain messages that relate to some new services.

Including other services becomes desirable as this allows new players access to these additional services: services that are the most likely to attract new competitive interest.

EDMI submits that shared market messaging should and can support all the services in the minimum service specification, as well as other common services that are not mandatory.  By limiting the definitions to the messaging, it allows for even more services to be offered that are frame agnostic and allows the industry to respond faster to new security issues.


## 6    Roles and Responsibilities (Box 5.1)

Is it appropriate that the metering coordinator be required to offer its services through the shared market protocol, unless otherwise agreed?

EDMI supports the broad position that has been taken in the consultation paper and that it is appropriate that the metering coordinator be required to offer its services through the shared market protocol, unless otherwise agreed.

Are there any risks in allowing third parties to access a shared market protocol platform? If so, would it be necessary to develop a separate authorisation process for users of the shared market protocol? Is AEMO the appropriate body to develop these requirements?

EDMI submits that the best solution is to develop a separate authorisation process for users of the shared market protocol and that this is based on a simple application system and recording of information.  AEMO, though the consultation process EDMI has recommended, would agree a framework where market participants provide each other with services or information under individual contracts.

EDMI does not support an access authorisation process where AEMO controls the final access and believes that individual participants are best able to determine how they will share data and information within the framework agreed with AEMO.

EDMI notes that this ability to determine access per participant is a key benefit of shared market messaging. By creating shared messaging definitions, rather than mandating a common protocol (e.g. DLMS or UK SMETS), participants are able to define how they exchange information, set security levels and negotiate communications methods.

## 7   Transition (Box 6.1)

*Is there a need for the current B2B e-hub to be maintained beyond the implementation of the shared market protocol? What factors would need to be considered when making this assessment?*

EDMI does not believe that it will be necessary for the current B2B e-hub to be maintained beyond the implementation of the shared market protocol. However, transitional arrangements will need to be considered during the move to a shared market protocol.

*Could all the services that are currently provided through the current B2B e-hub be provided via the shared market protocol?*

EDMI believes that while serious consideration should be made as to the value of services currently provided through the B2B e-hub, a smooth transition process would be better served by starting from the requirements of the new market, rather than the structure of the old.

*Would there be an advantage in having a transition period during which both the B2B e-hub and the shared market protocol operate? How long should such a period be? Would the costs of operating both systems for this period be justified?*

Any implementation of a new system requires a period of testing. Once testing has been completed, it is EDMI's experience that it is desirable to have access to a back-up option known to be stable. As a result, a period of transition would be essential to the proper introduction of the shared market protocol.

However, this transition period should be as short as possible and there should be a recognition that, as the B2B e-hub is winding down, it should not accrue costs relating to future development, planning, etc. Running both systems will attract a cost, but by ensuring thorough testing and by streamlining the B2B cost structure, a short transition period will keep the costs at a level that is justified as prudent risk mitigation.

Are there any significant implications should the shared market protocol not be operational on the same day that any changes from the expanding competition in metering and related services rule change take effect?

EDMI believes that the most important consideration is the commencement of the expanded competition in metering and related services rule change.   The existing and new participants in the market are capable of delivering core smart metering services alongside the current regime using existing or planned communications and messaging methods.

We say "alongside" because, as indicated by the consultation paper, the current B2B procedures are not capable of supporting many if not most of the new services offered by smart meters.  In particular, the current B2B procedures are incompatible with the fundamental ability to deliver real-time data.

EDMI notes that this is a shared system and that it is not proposed to make this system mandatory.  As such, while it is a valuable convenience and forms an integral part of the changes to the governance of inter-participant messaging, it is not necessary for the implementation of the much-anticipated opening of the market.