30 January 2014

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Market Review Consultation Submission for AEMC's Draft Report: Framework for open access and communication standards, EMO0028

Dear Commissioners,

EDMI Pty Ltd ("EDMI") welcomes the opportunity to make a submission on the Australian Energy Market Commission's ("AEMC") Draft Report: Framework for Open Access and Communication Standards ("the Draft Report"), dated 19th December 2013.

EDMI Pty Ltd is the Australian subsidiary of EDMI Limited (Singapore) ("EDMI Group"), part of the Osaki Electric Group (Japan). The Osaki Electric Group is a significant player in the global smart metering and switchgear markets.

EDMI Pty Ltd is the founding organisation of the global EDMI Group of companies. EDMI Pty Ltd has been supplying smart metering technology for the Australian market since 1990 and has contributed significantly to the development of high value, cost effective smart metering technology through commercial delivery and industry involvement.

Globally, the EDMI Group is considering a best of breed IEC meter manufacturer and deliverer of smart metering solutions. The EDMI Group has significant success and experience in 'retailer / customer lead' smart meter rollouts in the United Kingdom and New Zealand. In conjunction with local service providers, EDMI has rolled out over 1.6 Million IP Based Cellular Smart Meters (including communications).

EDMI thanks AEMC for the opportunity to provide a submission in relation to the draft report. Should you require any further information about this submission, please feel free to contact me on +61 407 028 305 or at andrew.thomas@edmi-meters.com.

Yours Sincerely,

Andrew Thomas

Executive Director

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Submission

EDMI believes that mandating technical communications standards is not necessary to deliver the Australian Government's policy objectives, nor does it directly suit the drivers behind the AEMC Power of Choice Review ("PoC"). Specifically, the proposals set out in the AEMC Draft Report linked to mandating specific technical standards through regulatory bodies is at odds with a market-led approach envisaged by the Power of Choice initiative.

Some of the specific parts of the Power of Choice Review that deviate from the recommendations of the Draft Report include:

- "establishing the right market arrangements to support investment in and application of DSP, consistent with **consumer preferences** and **demand circumstances**". (Page 14)
- "over time the **market** will provide the most efficient metering hardware and software investments if an appropriate and robust framework is in place". (Page 85)

EDMI strongly urges the AEMC to reinforce the 'market-led' approach described by the PoC Initiative including frameworks that allow a market choice of standards for communications as they evolve. EDMI understands that the AEMC wants to protect the future of the industry through appropriate frameworks to ensure long term benefits from the installation of smart meters. EDMI believes that if you are going to create communications frameworks these overarching principles are key:

1. If you are going to regulate a technical standard, only adopt very mature standards that are feature complete, ubiquitous and are supported by existing commercially available products.

Experience in the UK Smart Meter Programme has shown us that if application layer standards (such as ZigBee and DLMS) are specified by regulators and then the industry is asked to deliver companion specifications to deliver true interoperability, the project shall be doomed for significant delays and possible failure. "For the foreseeable future, requirements for the SMIP are emerging faster than the GB Companion Specification (GBCS) can keep up. This implies that we will never have an

interoperable solution using current methods."[1] The recommendation here was to use generic protocols that are not "application specific".

As specifications continue to evolve in the UK, not only do they need to be finalised, but then technology needs to be designed and implemented based on these standards. This will significantly delay the delivery of any benefits of smart metering.

2. In terms of communications, do not specify either the physical communications (since one communications type generally will not provide 100% coverage) or the application layer (since innovation is generally delivered in this space). In terms of the simple OSI model, if you are going to regulate, regulate the Network and Transport Layer (including Security) based around the ubiquitous Internet Protocols (IP, TCP, UDP, RPL).

If we look at the broader use of communications, the internet is the most innovative and complex network on the planet. Not only has the internet been built on a range of different physical mediums, it is widely recognised that "the application layer is one area that continues to see enormous innovation."[2] To ensure innovation in smart metering, we need to allow the application layer to be led by market development.

3. Global Machine to Machine ("M2M") technology has evolved rapidly since the introduction of the Internet. If we are to build a smart meter network that is focused on the customer and to deliver future benefit, particularly from Smart Grid applications, then it should be developed under the principles of 'The Internet of Things'.[3]

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[1] "Supplementary written evidence submitted by the Energy Services and Technology Association to the Energy and Climate Change Committee"
http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenergy/161/161we27.htm

[2] "Question 1: Internet and Innovation" http://www.internetsociety.org/question-1-internet-and-innovation

[3] "The Internet of Things" – Article – McKinsey Quarterly
http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_internet_of_things

EDMI delivered a demonstration to the Smart Metering Industry at the 2013 Smart Utilities Australia / New Zealand Conference. This demonstration showed the integration of existing IP based metering technology from EDMI and off the shelf demand response technology from Phillips and Belkin.[4] This demonstration proved that integration 'Point of Entry' can be at the Back End using B2B and Internet Web Service integrations and does not rely on specific application protocols being mandated.

[4] http://www.edmi-meters.com/NewsDetail.aspx?nid=63