



Jemena



AEMC Open Access and Communication Standards review

Impacts on Victoria to be considered when adopting a common market protocol

Michael Macfarlane – SmartNet and Customer Service Manager Strategy & Technology
(27 February 2014)

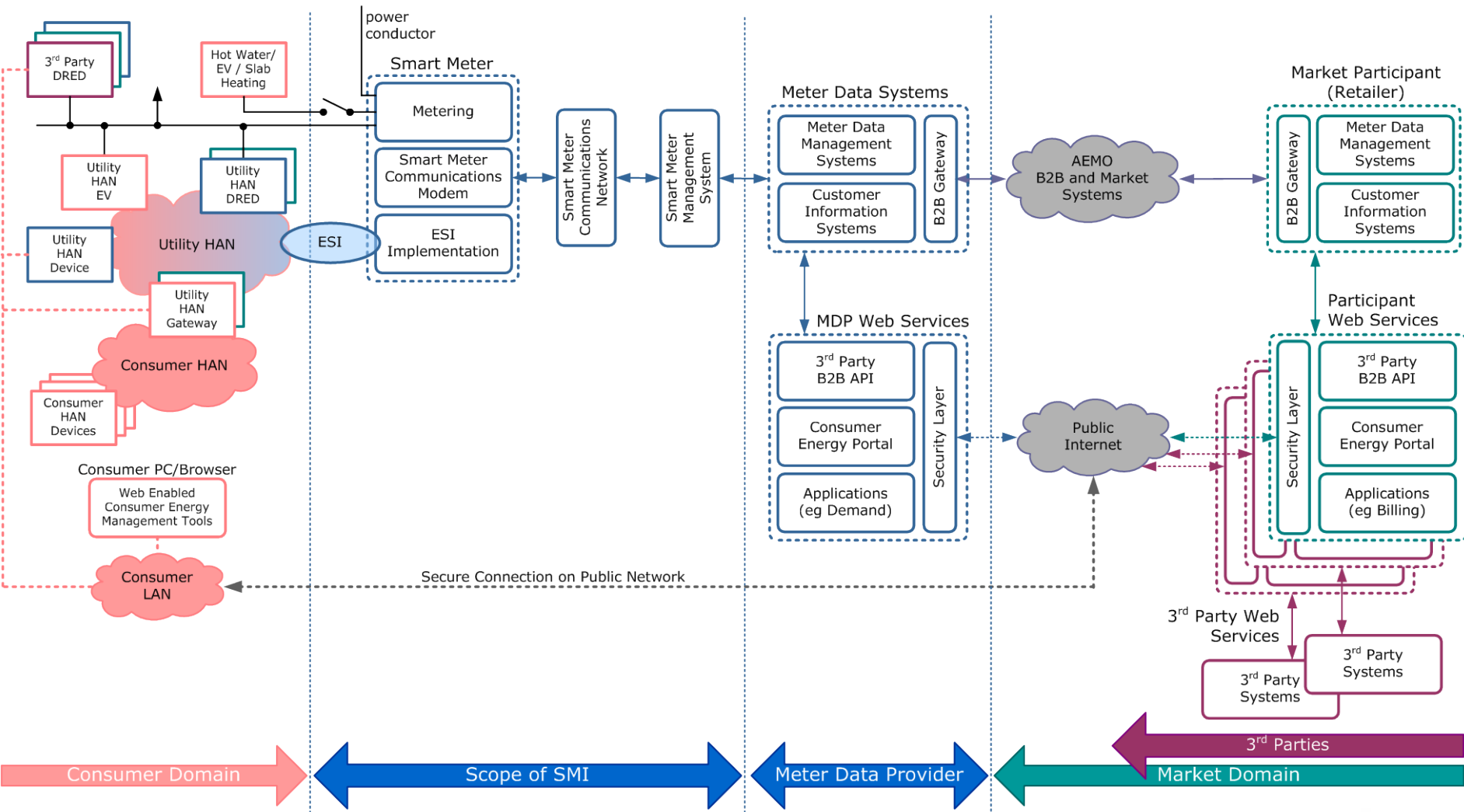


Smart (Advanced) metering in Victoria

- AMI Meters operate within the existing NEM framework, protocols and procedures
- The Vic AMI derogation allows for Type 5 AMI meters
- The Vic AMI process model was developed collectively by the market to accommodate AMI variations and anomalies
- AEMO B2B Procedures and protocols remain unchanged
- AMI type 5 meters are uniquely identifiable in market
- Remote AMI services replace locally provided metering services where practicable
- Other AMI enabled Advanced features and New functions are market driven



AMI (SMI) Market Interfaces



*Note the SMI Landscape is fully defined in the Load Management and Network Security Protocol



Common Market Protocols?

- We have a common market protocol today (AEMO B2B)
- The B2B protocol was not designed with AMI / smart meters in mind however many basic functions and some advanced functions map well
- Some Vic DBs have implemented Application Programming Interfaces, others offer batch processing facilitated access
- Peer to Peer bespoke protocols with many to many relationships between participants and many to many commercial agreements are unsustainable
- A minimum 'common market protocol' should be developed as an enhancement to the established AEMO B2B Hub
- A common market protocol should not preclude parties from developing peer to peer interfaces



AMI Enabled Services and Functions

AMI Service or Function	Market interface (internal/external)
Measurement and Recording	Local to meter
Daily Remote acquisition of energy data	via AEMO B2B
Daily Remote acquisition of event data	Internal to DB
Remote configuration and management of meter	Via AEMO B2B (eg. service orders)
Load Management - controlled load	Local to meter, internal to DB
Supply contactor operation (remote connect and disconnect)	via AEMO B2B
Loss of supply detection, restoration of supply notification	via AEMO B2B (next business day), internal to DB (real time)
(Emergency) Supply Capacity Control	internal to DB
HAN Services and messaging (IHD, EV, DRED, FDR, etc)	Portals and APIs
Energy portals, consumer analytics and price comparators	Web Portals
Quality of Supply Monitoring (voltage, power factor)	Internal to DB
Customer supply (safety) monitoring	Internal to DB
Tamper and Theft Detection	Internal to DB



Implications of a common market protocol

- All market participants have significant IT investment in B2B interfaces which should persist
- Victorian consumers have already paid (or are paying) for the IT solutions that enabled end to end meter to market to consumer
- This investment needs to be persevered yet its legacy should not stifle innovation
- A common market protocol should not result in a dilution of the AMI features and benefits
- The Common protocol combined with contestable AMI meters will result in greater bidirectional data flows through gateways and further IT investment



Transitioning to a Common Market Protocol **Jemena**

- Transitional arrangements need to allow for benefits to flow and grow to ensure a return on AMI investment for all consumers, networks and retailers
- A common market protocol needs to manage existing and new functions simultaneously
- Network services (data and functions) enabled by AMI must be retained
- To fully leverage Smart meter functions in a contestable market would require an expanded B2B including extensive near real time transactions
- All features supported by a meter need to be identifiable and discoverable by the market



Jemena

Questions?

