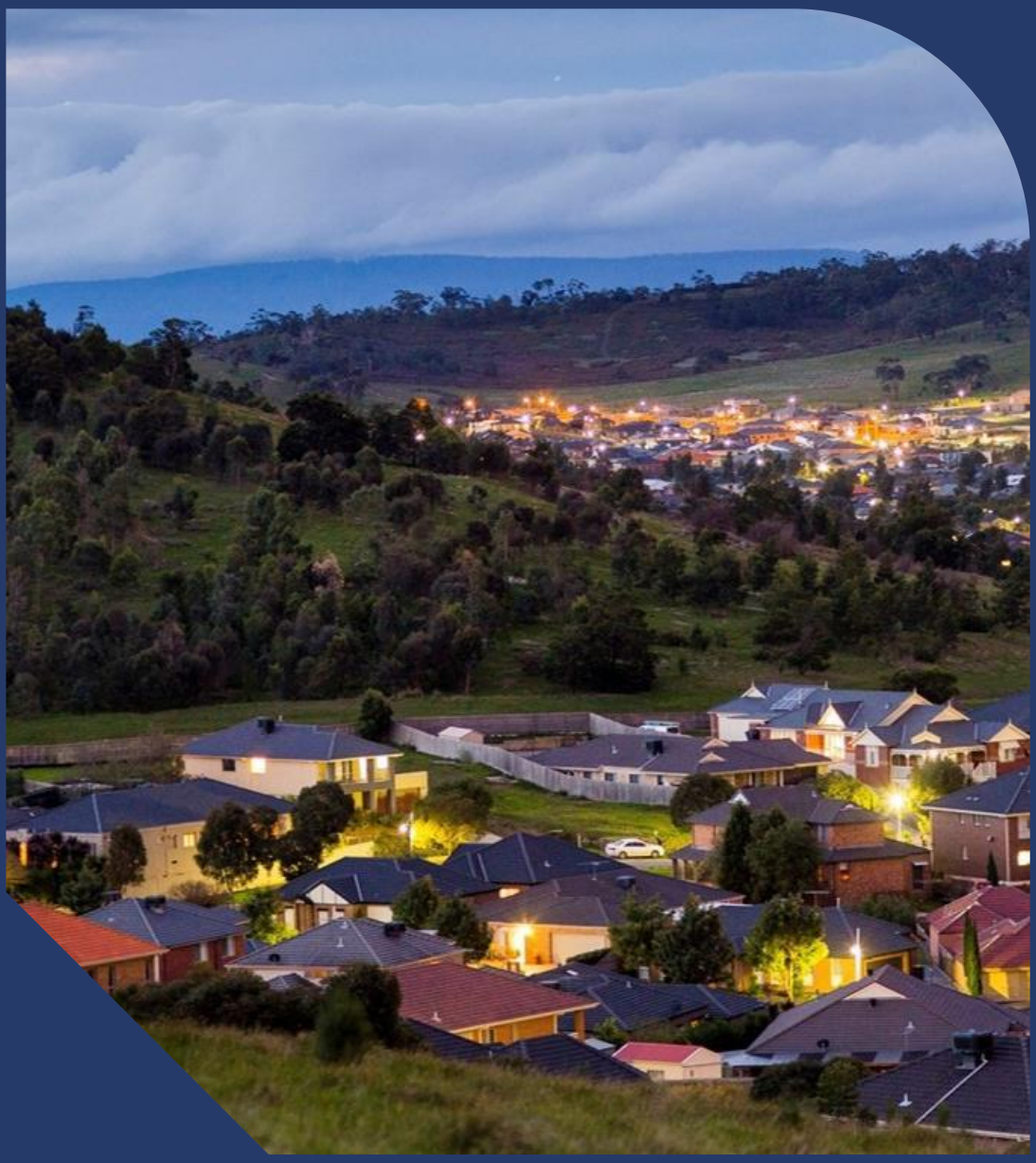
AusNet

Meter Asset Management - Distribution

AMS Distribution Metering Strategy (2024-31)

Electricity Meters & Metering Equipment - Part 0 Overview



ISSUE/AMENDMENT DRAFTING STATUS

Issue	Date	Description	Author
2.0	30/06/2018	Updated data and tables – forecast period extend to 2025	Brendan Buckland Srikanth Sridhar
2.1	27/11/2018	Updated Sections 3,4 &6	Brendan Buckland Srikanth Sridhar
2.2	12/04/2022	Updated Sections 4,6 and 7	Brendan Buckland Srikanth Sridhar
2.3	18/07/2022	Updated Section 5	Brendan Buckland Srikanth Sridhar
2.4	27/09/22	Updated Sections 5,6 and 7	Brendan Buckland Srikanth Sridhar
2.5	22/10/2022	Amended feedback from J.Betlehem	Brendan Buckland Srikanth Sridhar
2.6	8/01/2024	Review in line with revised forecast 5.3 and 7.6 and added updates to scheduled meter replacement initiative	Brendan Buckland Srikanth Sridhar
3.0	31/01/2025	Changes made following EDPR review	Justin Betlehem

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Supporting Documentation

The following document suite comprises the AusNet Asset management strategy for managing and maintaining equipment assets for advanced metering technologies. These documents shall be annually updated with reviewer feedback incorporated and support the respective FMECA management recommendation approaches.

Document	Ver	Owner(s)	Approver	Reviewer
Part 1 - Electricity Meters & Metering Equipment	2.0	Brendan Buckland Srikanth Sridhar	Fran Duiker	Justin Betlehem
Part 2 - Mesh Asset Management Strategy	1.0	Brendan Buckland Alan Crockett	Fran Duiker	Justin Betlehem

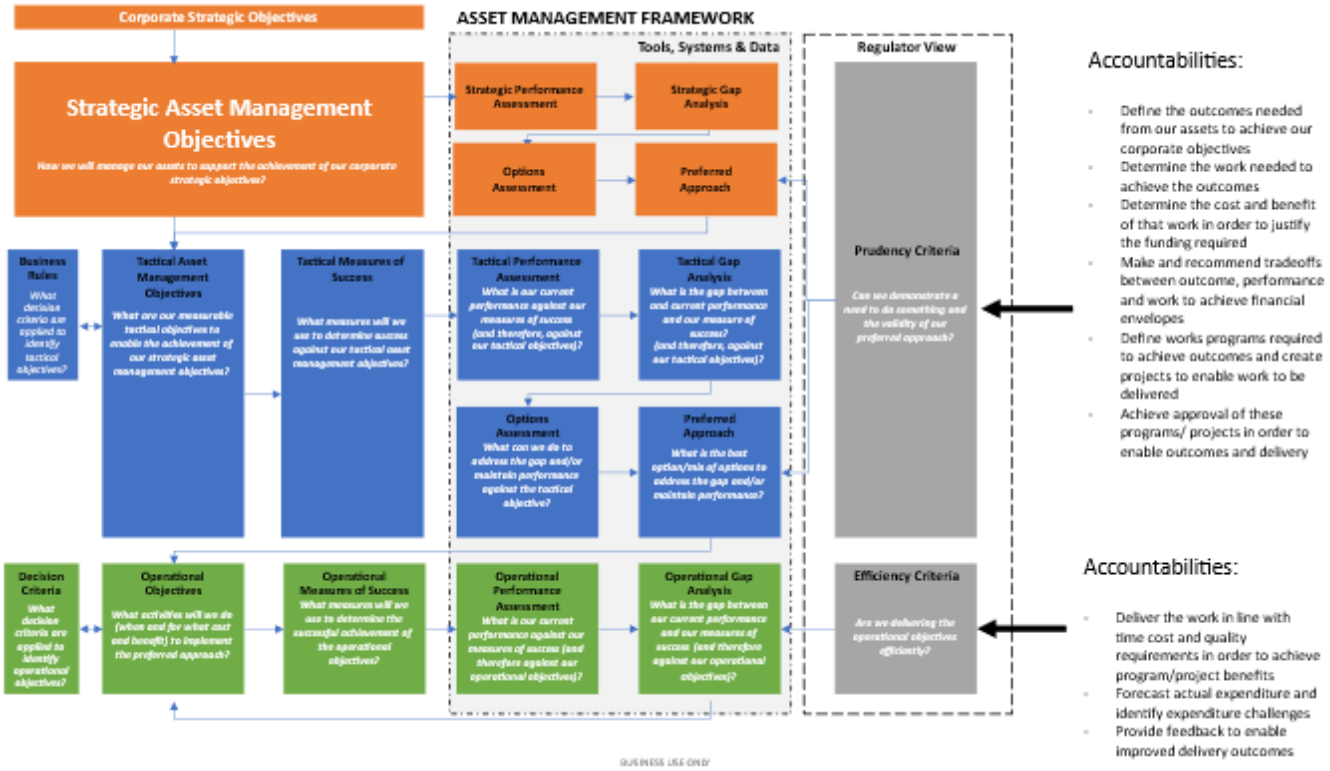
Acknowledgments

1. Recommendations from this strategy will be summarised and managed through this AMI Asset Management Strategy Overview document.
2. This document forms a part of the overall AusNet Asset Management Framework.
3. Figures, volumes and costings referenced within this document are subject to change. Where a statistic is required the document owner should be contacted for latest information.

Table of contents

1. Executive Summary

The Electricity Distribution Metering Asset Management Strategy (**EDM AMS**) provides the framework for our management of its metering assets for the period up to year 2031 and beyond. Within the context of the current and forecast states of the assets, this EDM AMS identifies the strategies to support the AusNet Metering Business mission in "Shaping the Best Metering Solutions and Services for our Communities". The EDM contributes to the overarching Asset Management framework by detailing the metering strategic and operational objectives which contributes to our Corporate Strategic objectives.



Asset Management Framework overview

The EDM Metering AMS consists of a Strategy Overview document (Part 0), together with the following two parts describing the specific asset classes and strategies for each of the major meter asset categories.

- **Part 1** – Electricity Meters and Metering Equipment (this document): the physical meter, meter firmware, meter program, low voltage current transformers, and associated meter test equipment.
- **Part 2** – Mesh Asset Management Strategy: Mesh communication Infrastructure and associated firmware and application support

Note: These aforementioned documents override any previous versions forming the Metering Asset strategy.

Over 820k Type 5/6 meters are currently installed and managed in the AusNet Electricity Distribution area, with over 90% of these remotely read capable smart meters. In addition, AusNet installs approximately 20,000 new meters to meet greenfield new connection and meter replacement obligations annually.

With the AMI mandated rollout completed in 2014, and the subsequent AMI remediation project completed by 2018, we have fewer than 1% non-AMI capable meters connected within the Distribution Network. These meters are predominantly located at sites where we has been advised of a customer refusal to have a smart meter installed, or where customer side defects exist (such as access issues) which prevent conversion to an AMI meter. Specific management strategies have been identified to manage and maintain the remaining fleet of non-AMI meters and are included within parts of this strategy.

Meter Asset Management, for the context of this document, includes the oversight of capital expenditure projects such as new electricity meter connections and meter replacements as well as operational metering activities which include in field maintenance works programs such as in-service meter and Low Voltage (**LV**) Current Transformer (**CT**) testing, meter inspections, "local" meter reading and meter services. In addition, activities such as meter asset procurement and logistics, forecasting and planning, remote metering digital system configuration and performance monitoring are included into Meter Asset Management functions.

The EDM Asset Strategy, is delivered by Metering Asset Management team to support the AusNet strategic objectives:

1. To position AusNet as a leader in the Energy Transition
2. To transform our customer experience.
3. Create and develop industry leading Employee value proposition.
4. Accelerate new business value.

The Metering business, in support of these strategic objectives ensures the delivery of safe, compliant and efficient metering and metering activities through:

- Enhanced condition monitoring of meters and the distribution network.
- Conducting annual compliance testing and inspections of meters and LV CTs, and verification of meter data as per Chapter 7 of the NER.
- Formal, rigorous acceptance testing of new meter types and meter programs prior to approval to deploy.
- Ongoing training, competency assessments and formal job authorisations.
- Optimising the functionality of the AMI metering platform to extract the best customer outcomes.
- Manage the compliance obligations associated with being an accredited Meter Provider (**MPB**), Metering Data Provider (**MDP**) and registered Meter Coordinator (**MC**).

2. Overview

2.1 Purpose of Document

The purpose of this document is to define the Asset Management strategy for our Type 5 and Type 6 electricity metering fleet in setting the direction and work program to support the regulatory obligations in the provision of metering services for the period to 2031 and beyond. The Asset Management strategy aims to:

1. Support the continued safe operation of the meter asset to provide the best customer experience.
2. Enhance the capability of the AusNet meter fleet to be compliant with this metering regulatory obligations as listed at Appendix A.
3. Maintain and test the meter asset so that it continues to meet regulatory compliance and business needs in the most efficient manner possible (for optimal total life cycle cost).
4. Provide strategies to implement the meter capabilities to better manage the AusNet' electricity distribution network and position AusNet for the future operating and regulatory environment, in alignment with our business plan.
5. Include the planning, forecasting, procurement, and logistics operations associated with ensuring adequate supply of metering equipment is available to meet our regulatory obligations.

Part 1 of this strategy will describe strategies and plans to meet our metering compliance obligations in respect of acting as MPB, MDP and MC. In particular, this document will detail how we comply with obligations detailed within Chapter 7 of the NER and Part A of the AEMO Metrology Procedure and Service Level Agreements around the provision of metering services.

These obligations include but are not limited to:

- In-service compliance testing as per AS 1284.13 for the Types 5 and 6 meter fleet. A comprehensive in-service assurance testing regime is also implemented annually.
- In-service metering inspection strategy and implementation.
- Initial acceptance and functional testing of new meter variants, firmware and software releases as required.
- Management and oversight of the meter data verification obligation for AMI meters in accordance with AS 1199.1-2003 in line with Chapter 7 clause S7.4.3(e) of the National Electricity rules.
- Implementation of the AEMO approved alternate testing practice for low voltage current transformers (LV CTs), requiring sample testing of CT families every ten years and the remaining LV CTs in each LV CT family to be visually inspected every five years.
- Replacing the remaining non-AMI meter fleet, including the proposed co-incident replacement of non-AMI meters when scheduled testing of the non-AMI meter is due, non-AMI meter replacements and abolishment's of long term de-energised metering structures.
- Development of improved meter fault analysis methods to minimise unscheduled maintenance and customer-initiated tests, utilising remote meter and event data and related network information.
- Investigation and development of new meter configurations and settings to support:

➢ The "smart network of the future" initiatives for safer, more efficient recording and analysis of the distribution network power quality

- Creation of enhanced metering programs to facilitate new tariffs for the delivery of emerging new customer services and Distributed Energy Resource initiatives.
- Meter settings to support dynamic load control and bulk storage device switching to align to low network demand periods.

2.2 Scope

The Electricity Meter Strategy scope applies to:

- All Type 5, Type 6 AMI and non-AMI electricity metering installations for which AusNet is the MC.
- Direct connect (whole current) and CT operated meter types, their associated meter program version creation and control and related meter firmware release and testing.
- Associated metering installation hardware, including the low voltage metering current transformers (LV CTs) and Network supplied external load control devices.
- Associated field and laboratory test, commissioning and support tools and processes, including meter and CT test equipment, meter vendor proprietary software and hardware required to develop meter program changes and to locally interrogate AMI meters in the field, and proprietary backend systems.
- Relevant meter procurement, operating, maintenance, support, replacement, and disposal activities associated with the metering hardware.

This Part 1 of the Meter Asset Management Strategy excludes activities applicable to:

- The meter communications modules and module firmware applicable to the AMI communications solution (subject of Part 2 of the EDM AMS).
- This document does not encompass strategies associated with the meter data to market regulatory obligations and strategies, the systems or processes associated with the MDP role.

2.3 Structure

This document is structured as follows:

- Asset Description: This section provides a summary of the meter asset, the key features and functionality, the current volumes, age profile and status by component/type and the current operating state.
- Strategic Plans: This section presents the strategies and volume forecasts for the various activities applied to the management of the meter asset, grouped as follows:
    - New Connections & Replacements – meter installations and exchanges due to new connections, meter abolishment, meter addition/alterations and meter faults.
    - Meter Maintenance – comprised of scheduled and unscheduled tests, inspections and investigations, and the associated meter asset management functions.
- Resources & Service Providers: This section identifies the resources and delivery partners used by AusNet in support of installing and maintaining the metering asset.

2.4 References

The key regulatory requirements governing the management of the metering assets and supporting systems are identified in the EDM AMS Strategy Overview (Part 0).

2.5 Meter asset management oversight

The Meter Asset Management team role within AusNet is to ensure AusNet remains compliant to the Meter Co-ordinator and Meter Provider obligations in line with Sec 8a. of Metrology Procedure Part A. In addition, it is responsible for all:

- Meter Strategy, test plans, and other compliance reporting, forecasting and response associated with AMI metering.
- New Product acceptance, evaluation and test.
- Accountable for metering compliance obligations relating to AusNet's Registrations as Meter Co-Ordinator and shared accountability as Meter Provider.
- Acceptance, test and release of new meter variants, meter programs and supporting firmware versions, including optimising AMI functionality, development and testing.
- Configuration Management of the meter and communication hardware including meter program design, test and release and firmware configuration for remote service capability.
- Oversight and forecasting of meter logistics, including warranty, refurbishments, disposals, and procurement.
- Meter Projects – Mesh Optimization, 3G decommissioning and 4G implementation.
- 5 minute data and Global Settlement works program.
- Oversight of meter maintenance activities.
- Monitoring and analysis of meter performance and compliance.
- Management of meter test equipment, calibration and accuracy.

3. Asset description

3.1 The meter asset

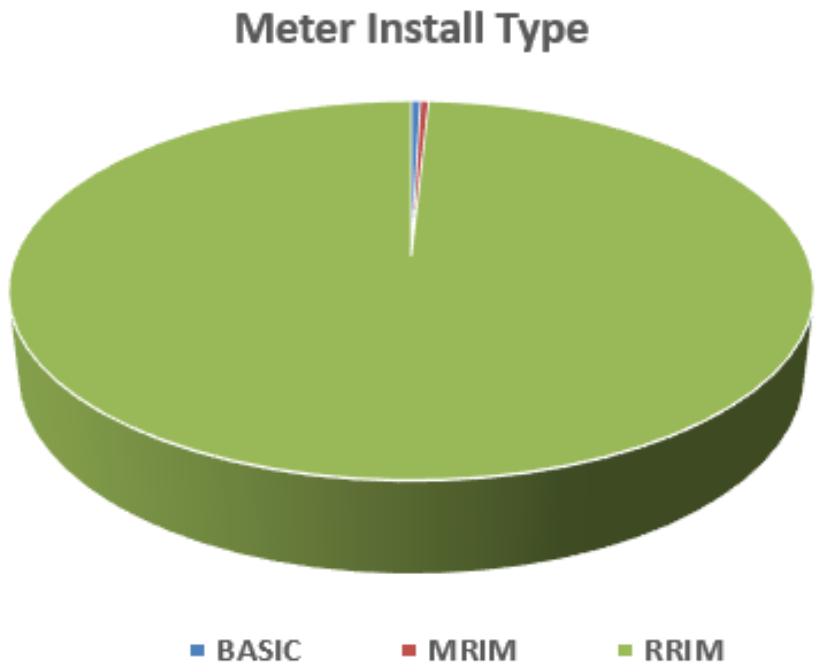
Our Installed meter fleet is comprised of

- 806,562 NMIs which consist of 828,363 Type 5 and Type 6 meters installed.

  (Meter equipment complies to clause s 7.4.3.1 – Overall Accuracy requirements for metering installations – Chapter 7 of National Electricity Rules v185).
- 815,122 meters are AMI remote capable meters.
- 7,596 are non-AMI meters (installed to 5,872 NMI connection points).
  - 4,101 are energised NMIs and
  - 1,771 are de-energised NMIs.
- 15,534 Low Voltage Metering Current Transformers (LV CT).

Of the 820,771 AMI capable meters installed, the following table indicates their read status in the Market.

METER INSTALL TYPE	TOTAL
BASIC	3,170
MRIM	2,480
RRIM	815,121



The metering solution used at a given customer site is determined by several factors, including:

- The assigned Network Tariff.
- The physical connection characteristics (e.g., phasing, direct or CT connected).
- Whether load switching is required at the meter (e.g., bulk storage hot water, slab heating, climate saver).
- If a customer requires bi–directional metering (e.g., has a customer installed a co-generation (solar) load; and
- Any future network management considerations such as Supply Capacity control (e.g., peak load diversification, or Demand Energy Resource (**DER**) initiatives.

3.1.1. AMI meters

The AMI meter is a "smart", solid state, electronic meter that, when installed with a wireless communications module, supports the minimum functional specifications required by the Victorian Government.[1]

AusNet currently operates a fleet of Landis+Gyr (L+G) U-series E350 meters of various phase and connection types which comply with the requirements of the governing regulations which include the NMI M6 Electricity Meters Pattern Approval Requirements (in accordance with the National Measurement Act).

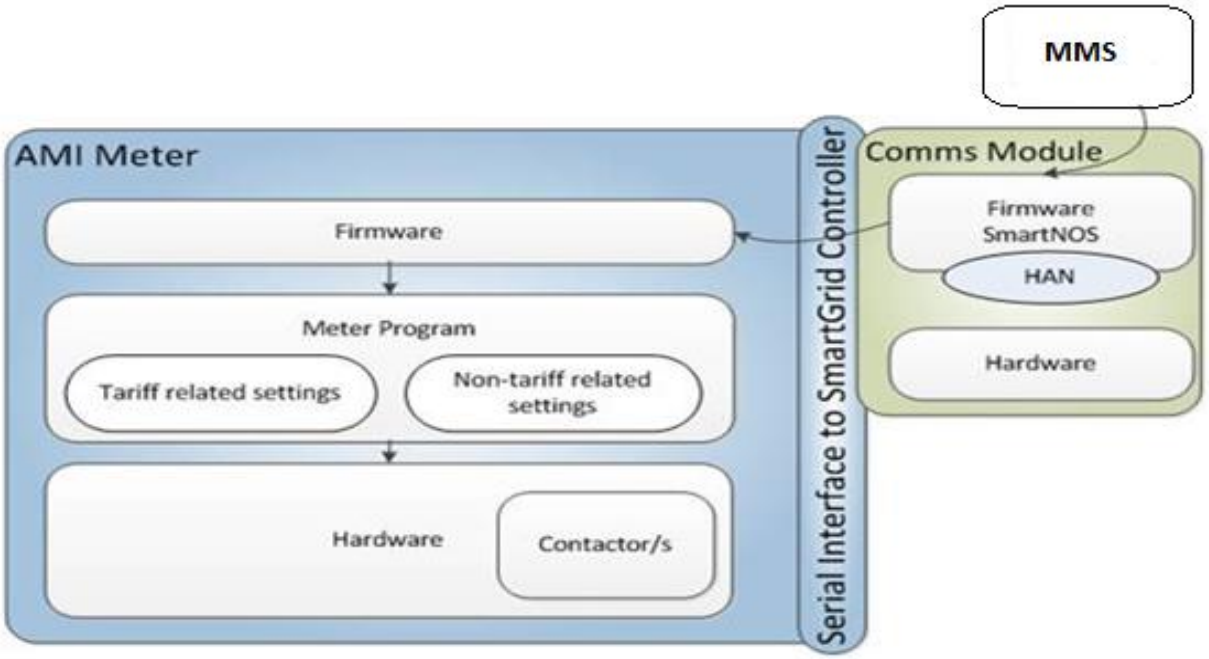
The key components of the AMI meter are:

1 Metering complies with the Minimum AMI Service Levels Specification (Victoria) September 2008 Release 1.1, and the Minimum AMI Functionality Specification (Victoria) September 2013 Release 1.2

- The metering hardware, consisting of Liquid Crystal Display and including 100 amp rated main supply contactor for all types, and a 40-amp rated load control contactor for some variants.
- The meter firmware, which provides the logic for controlling and unlocking the meter functions and interfaces to the communications solution used for remote two-way communications.
- The meter program and firmware combinations (configuration file), which provides the specific settings for the functions for each meter to be enabled.

Figure 1 below shows these logical components of the AMI meter and communications module ("communications card').

Figure 1: Block Diagram of AMI Meter & Communications Module



Key functionality of the AusNet AMI meter solution includes as a minimum, compliance to the Victorian Minimum AMI Functionality Specification – Release 1.2 dated Sep 2013.

At a high level, the main attributes of the solution include:

- Whole Current (direct connect) meters rated to a maximum of 100 Amp per phase.
- For LV CT meters, the load per phase is current transformed to a rated 5A primary capacity.
- All meter variants are four quadrant types allowing for import and export kWh and kVarh units to be recorded and profiled.
- Options to record 5, 10, 15, 30 and 60 minute interval metering data on single or multiple channels, depending on the meter type, memory selection type and program.
- Capable of storing more than 1,100 days of 30-minute single channel interval data.
- The meter's LCD display can be programmed to display a variety of energy consumptive registers, meter event statuses, communication connectivity health status and total accumulated energy registers.
- Meter event recording including date/timestamp, including voltage/current breaches, memory failures, suspect import energy detections, etc.

- All meters have been programmed to record specific performance alarms and events, including:
    - Meter internal temperature rises above the normal operating temperature for safety reasons.
    - Possible tampering as indicated by reverse energy due to line/load connections being transposed; and
    - Power down and Power up events that assist in power loss and restoration management.

These events and alarms are used to validate the correct operation and acknowledgment of remote instructions to the meter. They are key tools in assisting in detecting meter failures and managing meter performance.

- Capable of remote re-energisation and de-energisation through the internal 100A rated load supply contactor.

- An internal 40A rated load control contactor* programmed to switch specific customer hot water, heating or other loads according to network tariff or load control requirements (some meter variants). An additional "boost" function is available to allow customers to provide for additional bulk storage heating through the "boost" button located on the main meter face.

* The load control contactor operating times assists in the management of network peak loads and supply quality through the capability implemented via "randomised" switch on times, and by applying different switching periods for specific customer cohorts. The load control can be overridden and re-configured remotely.

3.1.2. Non-AMI Meters

The residual non-AMI meter fleet consists of various meter types, manufacturers, age and are predominantly operating as Type 6 manually read meters on a quarterly meter reading cycle. The list of installed non-AMI meters is maintained in AusNet SAP-ISU application and are subjected to the same test and inspection requirements as our AMI class 1 meters. However, the accuracy of aged non-AMI meters will eventually deteriorate to the point these meters do not meet class 1 meter accuracy requirements.

All non-AMI metered sites where either a customer requested or business-initiated meter change is required will be installed with an AMI capable, class 1 grade meter.

4. Overarching AMI Strategy

In light of the performance issues, elevated operating costs and impending obsolescence of the Policy Net enabled WiMAX and 3G technologies, and after detailed consideration of a number of options, AusNet adopted an AMI Strategy to undertake a staged replacement of the existing Policy Net WiMAX / 3G communications infrastructure with mesh. The options assessment process was undertaken utilising a structured, whole of life framework and identified that a staged transition to mesh would provide the best asset management, end to end performance, economic outcomes while delivering customer benefits as quickly as possible.

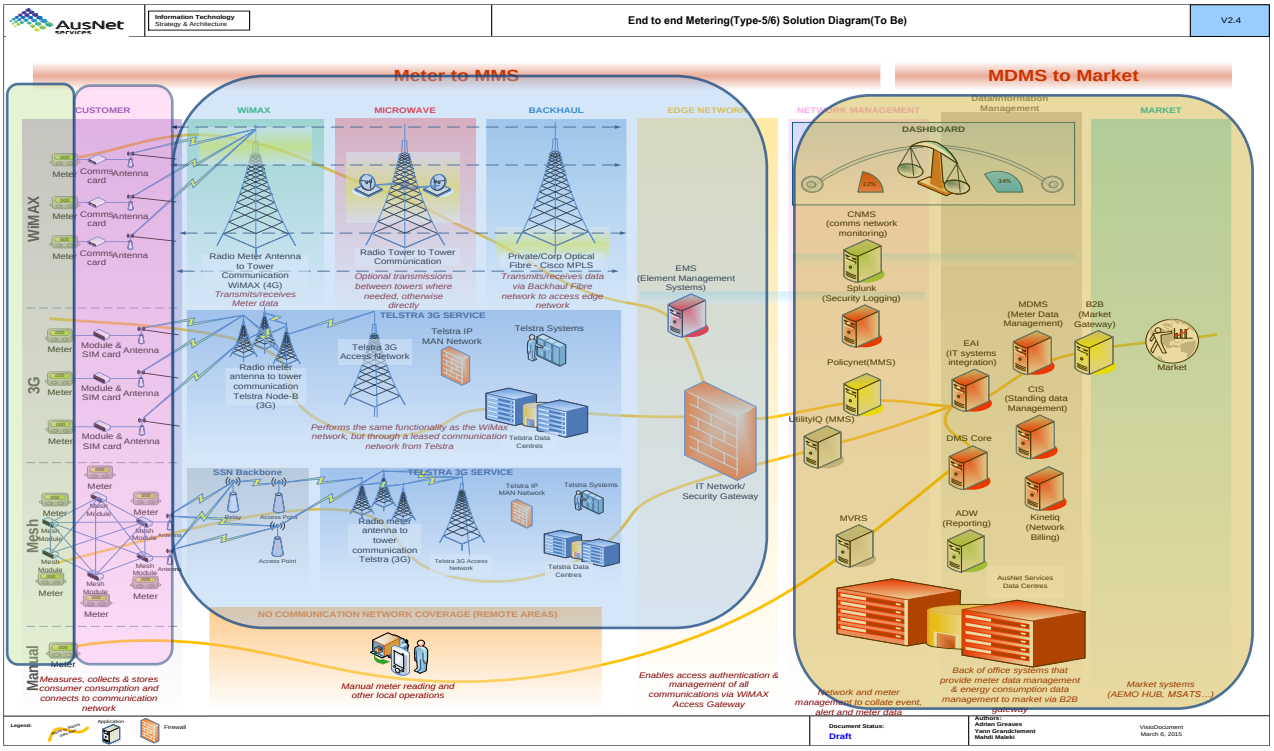
This replacement will bring the business into line with the other four Victorian Distribution Businesses who are successfully utilising a mesh solution for their metering services.

The staged replacement incorporates the following key steps:

- Stage 1: Secured and stabilised the 2015 and 2016 WiMAX solution to support the ~440,000 logically converted WiMAX meters. (**Complete**)
- Stage 2: Deployed a mesh solution:
    - Deployed a mesh solution utilising a proven technology to provide a mesh backbone enabling coverage of 98% of the meter fleet. This step involves establishing and adapting IT infrastructure and applications to support a mesh-based solution including the development of a new MMS. (**Complete**)
    - Deployed a mesh solution for the remaining 270,000 meters (infill). (Complete)
    - Deployed a mesh solution for new connections and replacements (after 2020). (**Complete**)
- Stage 3: Replaced obsolete Policy Net WiMAX communications modules in an orderly and efficient manner (2017 to 2024) which was completed in 2023. (**Complete**)
- Stage 4: Optimise the AMI solution and implement strategies to address remaining non communicating and non-AMI metering installations.
- Stage 5: Mitigate risk against large population meter failure due to end of life hardware components. AusNets meter age profile determines over 600k of meters are within 6 years of age of each other. By 2031, the oldest AMI meters will be reaching 22 years old against an expected life cycle of 10 to 15 years. We are planning a structured replacement of the oldest meters in the fleet on an annual replacement meter program as opposed to increase effort in addressing higher "fix on fail" faults and after hour call outs relating to defective metering.

Figure 3 below depicts the end to end AMI infrastructure for the period 2015 to 2023, incorporating the three communication technologies (noting that in line with the strategy detailed above, Policy Net 3G communications modules installations were discontinued by the end of 2022).

Figure 3: AMI Solution Architecture Overview (2016 to 2023)



The AMI strategy will deliver the following benefits:

1. Compliance against regulatory obligations by the end of 2016 (noting WiMAX risk associated with performance and hardware failure). These obligations are detailed in Attachment 1 and include:
    - Minimum AMI Service Levels Specification
    - Minimum AMI Functionality Specification
    - National Electricity Rules
    - AEMO's MDP Service Level Procedure
    - Metrology Procedure Part A
    - Metrology Procedure Part B
2. Enable the Business to deliver several key benefits to the broader network and customers, noting that maintenance of an effective functioning population of smart meters and their associated communication network has become an integral part of the distribution service regardless and independent of the metering services themselves. These network and customer benefits include the following:
    - Better investment planning – more informed and, therefore, less conservative augmentation, based on improved long term spatial demand forecasts.
    - Demand management – improving the integration of demand management activities into network planning.
    - Improved efficiency – more efficient operating and capital expenditure because of more informed decision making. For example, using smart meter data to allow phase balancing or transformer tap adjustment to solve local network stresses avoiding network augmentation.
    - Improved community safety – using smart meter data to identify and prevent shocks from a failed neutral in the service lines and identifying unsafe and unauthorised network connections.
    - Short term operational benefits – from timely and accurate short term demand forecasts.
    - Improved forecasting capability – using smart meter data to better understand consumer behaviour including:

- temperature-energy correlations, which can now be calculated with a significantly higher degree of accuracy due to interval data, rather than using quarterly billing data.
- energy profiles for houses built at different times, which illustrates the impact of energy efficiency.
- energy profiles for solar versus non-solar customers, which quantifies the impact of energy savings from solar installations and impact of solar at time of peak.
- the impact of different price structures on different customers.

- Building an Australian leading solar uptake model – the objective of this study was to provide a model to understand and predict demand for market uptake of distributed solar power based on consumer behaviour. This provides:
  - Improved robustness of solar, electric vehicle and battery storage uptake forecasting as an input to allow more targeted and informed demand management strategies and projects to be developed
  - An improved understanding of factors driving solar, electric vehicle and battery backup uptake, especially customer-driven factors
  - Exposure to other methods of modelling, including statistical analysis techniques, with the potential to incorporate these methods in future projects including non-solar modelling
  - Assist in the planning required for the electrification of the grid activities and transition away from gas.
- Data provision to the community – the ability to provide customers, customer groups and government agencies with data that imparts insights they have not had access to before. Recent examples include:
  - the provision of energy consumption data to agencies such as the Northern Alliance for Greenhouse Action and the South Gippsland Shire Council
  - the provision of interval data from smart meters to better inform the Victorian Government's My Power Planner website.
  - presenting energy and demand insights for our customer consultations.

3. Allow the business to move to an efficient operating model through the staged rationalisation of communication technologies, digital architecture simplification and bring operating costs in line with industry best practice.

5. Asset Strategy Overview

Detailed asset management strategies are contained separately in Parts 1 and 2 for each component of the AMI meter assets. The key points from each section are detailed below:

6.1 Part 1: Electricity Meters & Metering Equipment

The AusNet Type 5 and Type 6 electricity meter asset is predominantly comprised of AMI meters, supplied by Landis + Gyr (**L+G**), with approximately 850,000 AMI meters of 10 different meter types installed since 2009. Additionally, approximately less than 5,000 energised non-AMI meters remain in usage.

Management activities to be applied to the AMI and non-AMI meter assets are classified as new connections / replacements (capex), and meter maintenance (opex) involving tests, inspections meter asset management and logistics. Projected volumes of new connections and replacements over the period 2024 to 2029 are detailed in the table 1 below.

Table 1: Meter New Connections & Replacements (with co-incidental mesh comms installed – July 2024 to June 2030

	2025-26	2026-27	2027-28	2028-29	2029-30
New Connections	17,409	17,920	18,265	18,603	18,964
Replacements	7,647	9,406	9,870	40,217	70,423
Total Installations	25,056	27,326	28,135	58,821	89,387

The key strategies for our Type 5 and Type 6 electricity AMI meter assets are:

- Continued improvement in the delivery of safe, compliant and efficient metering and metering services through:
    - Enhancement of the remote condition monitoring of meters and the distribution network.
    - Conducting compliance testing and inspections of meters and LV CTs, and verification of meter data.
    - Formal, rigorous acceptance testing of new meter types and meter programs prior to deployment.
    - Ongoing training, competency assessments and formal job authorisations.
- Introduction of three new AMI meter variants from L+G, replacing the existing single phase and three phase meters due to the expiration of pattern approval for these existing meters.
- Complete all AS 1284.13 scheduled in-service initial and ongoing compliance meter tests for existing and new AMI meter types.
- Management of the meter data verification program for AMI meters in accordance with AS 1199.0 "Sampling Procedures for Inspection by Attributes".
- Implementation of the AEMO approved alternate testing practice for low voltage current transformers (LV CTs), requiring sample testing of CT families every ten years and the remaining LV CTs in each LV CT family to be inspected every five years.
- In consultation with AEMO, development of a management approach for the residual non-AMI meters, including the proposed installation of an AMI meter when scheduled testing of the non-AMI meter falls due
- Development of improved meter fault analysis methods to minimise unscheduled maintenance and customer-initiated tests, utilising remote meter and event data, and related network information
- Investigation and development of new meter programs to support:
    - the "smart network" initiatives for safer, more efficient management of the distribution network.
    - release of new tariffs for the delivery of emerging new customer services.
    - EV and battery storage data and network load monitoring and control solutions.

  - Network quality of supply monitoring such as frequency control and loss of supply automation services.
- Development and implementation of enhanced asset management capabilities to support distribution network management and group load controls.

6.2 Part 2: AMI mesh Communication solution

The remote metering communications solution managed by AusNet under this asset strategy include:

- Mesh communications modules for installation on a radio-frequency (RF) mesh network which are integrated into the electricity meters.
- Mesh MicroAP communications modules which can operate as a single module in both a mesh or 3G/4G communications area, or act as the 3G/4G backhaul for up to several hundred adjacent mesh modules.
- Access Points and Relays installed strategically on LV distribution poles and network used to create the required backhaul communications medium to send metering data to the Meter Management System. This mesh network, and the associated mesh communications modules have been progressively introduced from late-2015.

6.3 IT Applications

The IT applications that form part of the end-to-end solution supporting the EDM are the:

- Meter Management System (**MMS**), being Utility IQ for the mesh communications network
- SIQ application for Power Quality data collection.
- Meter Data Management System (**MDMS**), Energy IP.
- SAP Customer Information System (**CIS**) for service order management, connection point management and asset management.
- Enterprise Application Integration (**EAI**), WebMethods, orchestrating the system interfaces.
- Billing and revenue management system, Kinetiq.
- Manual meter reading tool, MV-RS Electricity.
- Network monitoring and reporting tools.

This set of applications supports the regulated metering obligations and provides the necessary data and functionality that underpins AusNet' provision of efficient distribution services.

IT infrastructure strategies are driven by the emerging obsolescence and ongoing support of end of life product.

Specific strategies for AusNet's AMI IT applications are:

- Upgrade and extend the end-to-end network monitoring and reporting functionality for improved compliance / service level performance.
- Upgrade the SIQ application associated with improved Power quality data sets, latency and performance improvements.
- Integration of UIQ/SIQ events and data sets into the advanced ADMS solution.
- Upgrade SAP CIS to consolidate enterprise business functions, and automate inventory management and service order management processes for greater efficiency.
- Upgrade functionality and capacity of the Kinetiq revenue management system to maintain regulatory compliance and continued business service.
- Streamline system performance by establishing EAI as the interface for the key applications, including MMS and MDMS, and implementing the ongoing EAI upgrades.

- Upgrade UIQ to ensure capacity and latency issues are mitigated, (current capacity is 850k meters).

6.4 IT Infrastructure

The IT infrastructure that forms part of the end-to-end solution supporting the EDM assets are:

- Data Centre Network and Communications Infrastructure
  - Routers
  - Switches
  - Firewalls
  - Load Balancers
  - Network Security
- Data Centre Fit outs
- Computer Platforms:
  - Oracle
  - Cisco servers
  - Database Licensing
  - Orchestration and Automation augmentation
  - Platform Security

This existing infrastructure supports the regulated metering obligations and underpins AusNet's provision of efficient distribution services. However, many of these infrastructure components were deployed as part of the AMI program, and as such, will reach end-of-life and fall out of support. Replacement of this IT infrastructure is required to maintain continuity of service and lower ongoing support costs, as part of the life-cycle management of the asset.