

## Attachment 16.1

# SA Power Networks: Customer Data Quality Plan 2015-2020

September 2014





# Customer Data Quality Plan 2015-2020

V1.1



# Executive Summary

The commencement of Full Retail Contestability in 2004 brought a large repository of customer information, new business processes and data exchange obligations to SA Power Networks to manage. Over time it became evident that there were shortcomings in our data that affected the outcome of business processes, and ultimately the customer service provided to South Australians and the effectiveness of our field workforce.

Throughout the past 5 years we have undertaken a series of data improvement initiatives on a subset of data issues. Also during this time our reliance on the quality of customer data has increased as we have implemented new systems and business processes. Issues with the quality of our customer data are now much more critical to our daily operations. This plan, which follows our previous work in the area, has been developed to address the issues with customer data that we are experiencing, and also put us in good stead for the implementation of future initiatives contained within our Customer Service Strategy. The Customer Data Quality Plan is a key enabler for the delivery of our Customer Service Strategy and the achievement of our corporate strategic objectives.

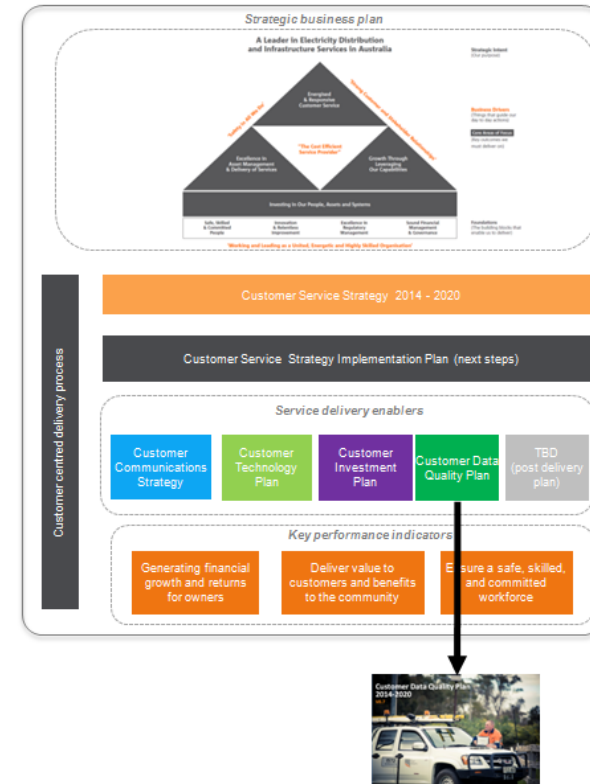
## Our 6 focus areas for customer data improvement are:

1. *Communicating with our customers*
2. *Locating our assets and customers*
3. *Managing the connectivity of customers to the distribution network*
4. *Providing information between the field and office*
5. *Enabling and supporting our future plans*
6. *Overarching improvements (inc. governance, processes, data ownership)*

## Our approach

To develop these focus areas and their initiatives we have undertaken the following process:

- Identified the core customer functions and business processes undertaken by SA Power Networks and the data that drives them.
- Reviewed data issues raised through various forums since the initiation of the data quality program in 2009.
- Discussed data concerns with key stakeholders
- Identified the data requirements for our future improvements
- Identified best practice data management tools and techniques required to support the customer data improvement initiatives in the business.
- Consolidated this information into a series of initiatives designed to meet our current and ongoing customer data requirements



## The objectives of the Customer Data Quality Plan are to:

- Ensure data is managed as a valued asset
- Enable timely access to relevant information for our customers
- Provide timely and accurate information to our field crews and contractors
- Enable and support our future plans by providing a solid foundation of data
- Achieve outcomes as directed by the Corporate Strategic Plan
- Align our data management practices with the principles in the ITSP (Integrated Technology and Systems Plan)
- Achieve outcomes as directed by the Customer Service Strategy

# Customer Data Quality Plan Outline

<p><b>Overarching improvements</b></p> <p><i>Provide the appropriate level of governance, structure and toolsets to enable our data to be managed and improved effectively</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>Current there are no formal policies relating to the management and improvement of customer data.</li> <li>Active house developed property address management toolset has been used for the past 3 years but is not adaptable to the changing needs of the data management function or expandable to other elements of customer data.</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Develop and implement a data governance framework to coordinate customer data management across lineages and alignment to the Network Asset data governance program, implement data quality tool to enable the following capabilities:             <ul style="list-style-type: none"> <li>Identify and resolution of data issues</li> <li>Identification and tracking of key data quality metrics</li> <li>Management of expurgation of information/accuracy</li> </ul> </li> </ul>
<p><b>Communicating with our customers</b></p> <p><i>Provide high quality information to our systems and processes that facilitate effective communications and interactions with our customers</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>Accurate customer information is critical if we are to be successful in our efforts to proactively communicate with our customers or respond to their requests.</li> <li>Our customer information is currently obtained from retailers through the Customer Detail Notification (CDN) data transactions.</li> <li>Automated business processes such as unplanned outage management, planned outage management and O&amp;O (Out-of-Order) Service Level Payments are heavily reliant on the quality of customer information.</li> <li>The number of successful and failed calls to our call center is</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Establish a team that is dedicated to managing the customer information received from retailers.             <ul style="list-style-type: none"> <li>Actively manage retailer to ensure correct customer information is provided in a timely manner.</li> <li>Establish a series of performance metrics that can be used to support any issues raised to retailers. AEMO (Australian Energy Market Operator) and the ISO-C (Independent Energy Regulator).</li> <li>Implement a regular customer data review and evaluate to retailers. AEMO and the AEM through the our program.</li> </ul> </li> </ul>
<p><b>Locating our assets and customers</b></p> <p><i>Maintain a high quality record of location information to enable our assets and customers to be found</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>Accurate information about the properties our assets are located on and where our customers reside ensures we are able to locate them when required for maintenance and fault finding.</li> <li>Property address information is maintained by SA Power Networks and we are responsible for the provision of accurate information to other NEM (National Electricity Market) programs.</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Proactively engage the team of people that are working to correct our address to enable the backlog of corrections to be processed within 24 hours.</li> <li>The addition of a temporary fix will enable this to be achieved.</li> <li>Establish a facility to manage a single source of addressing reference information and process to maintain and make it available to other systems to update data entry.</li> <li>Addressing data quality issues is required to achieve</li> </ul>
<p><b>Managing the connectivity of customers to the distribution network</b></p> <p><i>Manage the critical link that associates our customers with our network assets</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>The connection of a customer to the distribution network is achieved in the service system through the establishment of a link between the NEM and service connection point. This link identifies network assets associated with the customer's supply to the substation.</li> <li>The NEM is a critical piece of information in many processes including governed outages, unplanned outages, asset inspection and maintenance.</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Establish responsibility in Customer Relations for the creation and establishment of the NEM SP link at the point where the new connection is processed.</li> <li>Establish responsibility in Customer Relations for the creation and connection of NEM SP links for Life Support, Major and Critical Customers.</li> <li>Establish responsibility for the creation of NEM SP links with Customer Customers.</li> </ul>
<p><b>Providing information between the field and office</b></p> <p><i>Facilitate the bi-directional flow of information between the field and corporate systems to establish a continuous data improvement feedback loop</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>The data used for dispatching supply restoration and planned work jobs to the field may be up to 24 hours outdated. This means that any data correction or property information changes that occur in the office are not reflected in the field.</li> <li>For work types that are focused on our assets, such as the inspection of feeders, the latest and property asset information associated with customer are not attached to the work days end.</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Under take a project team design the interfaces that are used to provide data to the field. The solution should allow independent updates of customer, property and network data.</li> <li>Establish a source of property information that can be used to supplement our customer details and take their place for properties that are not processed by our systems.</li> <li>Establish a feedback channel for field crews and contractors through the Toughbook, smart phone or other devices that enables the field to assist office resources with updates to the corporate</li> </ul>
<p><b>Enabling and supporting our future plans</b></p> <p><i>Build a solid foundation of accurate data to enable our future plans for proactive communication, automated processes and visibility of the current state of work</i></p> <p><b>WHAT IS IT ABOUT?</b></p> <ul style="list-style-type: none"> <li>The proactive and to automate business processes and corporate systems are required to make decisions based on default customer rules and the data available in the system. If the relevant records reflect the data is of poor quality then the resulting decisions made by the system will be flawed.</li> </ul> <p><b>HOW CAN WE IMPROVE?</b></p> <ul style="list-style-type: none"> <li>We need to ensure all corporate systems are using the same set of consistent information. The rules and workflow for handling and integrating data between systems needs to be reviewed and improved.</li> <li>Customer asset current, up to the minute information. Customer data held only on the office data providers as they are quality controlled with the integrity of the recording toolset. Our investment in these solutions will ensure the integrity of the information about the asset and completion of these jobs.</li> <li>When this information is required for the project, stakeholders have a clear understanding of the data required and the completeness of the data will meet the delivery of the project benefits. Information about the quality of data needs to be visible, available as well as the planned timeline for correction to data, that is either purpose.</li> </ul>	<p><b>INITIATIVES</b></p> <ul style="list-style-type: none"> <li>Single view of Customer (SVC) (Customer Asset Strategy)             <ul style="list-style-type: none"> <li>The implementation of a single customer view provides a significant benefit in the capacity to resolve all of the information relevant to a customer, sourced from multiple systems, all in a single display. In order for the relevant information to be released and the benefits of this product to be realised the data it releases must have a high degree of accuracy. Data must be improved from its current state before this product is implemented.</li> <li>Integration with field tool systems to enable work from the field to be captured and used when appropriate.</li> <li>Integration of real time mobile data to ensure and mine out transactions to enable visibility of the current state of work.</li> <li>Cloud based based information about work occurring on network assets to the clarity of a customer's residence for information in the field.</li> </ul> </li> <li>Data quality metrics must be operational required, especially in relation to the cloud data replication processes.             <ul style="list-style-type: none"> <li>Ensure data of suitable quality for governing system requirements and/or SVC (Customer Relationship Management) implementation to simplify the data capture effort.</li> <li>Ensure data of suitable quality to be exposed to the public through website and other initiatives.</li> </ul> </li> </ul>
<p><b>SUCCESS MEASURES</b></p> <ul style="list-style-type: none"> <li>6.1 - Data integration needs between corporate systems and the cloud systems are progressively improved</li> <li>6.2 - Data requirements for the SVC are identified and a plan for their improvement is created and executed</li> <li>6.3 - Data requirements for public exposure are identified and a plan for their improvement is created and executed</li> </ul>	<p><b>SCORE COVERAGE</b></p> <ul style="list-style-type: none"> <li>Property Data</li> <li>Data Integration</li> </ul>

## Overarching improvements

*Provide the appropriate level of governance, structure and toolsets to enable our data to be managed and improved effectively*

## Communicating with our customers

*Provide high quality information to our systems and processes that facilitate effective interactions and communications with our customers*

## Locating our assets and customers

*Maintain a high quality record of location information to enable our assets and customers to be found*

## Managing the connectivity of customers to the distribution network

*Manage the critical link that associates our customers with our network assets*

## Providing information between the field and office

*Facilitate the bi-directional flow of information between the field and corporate systems to establish a continuous data improvement feedback loop*

## Enabling and supporting our future plans

*Build a solid foundation of accurate data to enable our future plans for proactive communications, automated processes and visibility of the current state of work*



# Customer Data Quality Plan 2015-2020

## Strategic focus areas

### Overarching improvements

Provide the appropriate level of governance, structure and toolsets to enable our data to be managed and improved effectively

### Key initiatives

- Develop and implement a data governance framework to encompass customer data management and maintain linkages and alignment to the Network Asset data governance program.
- Implement a Data Quality tool to manage our customer data **∞ BI Strategy (Reporting & Analytics)**
- Develop and implement a resourcing plan for customer data management
- Implement a training plan for customer data management resources
- Develop a communication plan for field crews to educate and promote achievements with data quality and receive feedback in relation to current data issues.

### Communicating with our customers

Provide high quality information to our systems and processes that facilitate effective interactions and communications with our customers

### Locating our assets and customers

Maintain a high quality record of location information to enable our assets and customers to be found

### Managing the connectivity of customers to the distribution network

Manage the critical link that associates our customers with our network assets

### Providing information between the office and field

Facilitate the bi-directional flow of information between the field and corporate systems to establish a continuous data improvement feedback loop

### Enabling and supporting our future plans

Build a solid foundation of accurate data to enable our future plans for proactive communication, automated processes and visibility of the current state of work

### Key initiatives

- Establish a team that is dedicated to managing the customer information received from retailers. **∞ BI Strategy (Reporting & Analytics), PALSLA & National Electricity Market (NEM) Initiatives.**
- Review business rules for CDN (Customer Details Notification) data processing to ensure maximum value is obtained from this data source.
- Supplement the retailer provided customer details with information provided by 3<sup>rd</sup> parties **∞ BI Strategy (Reporting & Analytics)**
  - Validate and enhance our current data set using externally sourced information

### Key initiatives

- Process backlog of address data exceptions.
- Establish and maintain a single source of addressing reference information **∞ ITSP**
- Establish a facility to analyse and manage the GPS coordinate updates received for meter locations. **∞ BI Strategy (Reporting & Analytics)**
- Undertake a project to reconcile and cleanse the addressing data we are responsible for in the market systems **∞ NEM Compliance**
- Transition the process of address correction to the new data quality tool. **∞ BI Strategy (Reporting & Analytics)**
- Add location and hazard management data elements to the data quality tool. **∞ BI Strategy (Reporting & Analytics)**

### Key initiatives

- Establish responsibility for the establishment of the NMI-SP link at the point where the new connection is processed.
- Establish responsibility for the creation and correction of NMI-SP links for Life Support, Major and Critical customers. **∞ ADMS Stage 2**
- Establish responsibility for correction of NMI-SP links with Customer Relations and resource a team of temporary employees to process corrections.
- Establish a NMI-SP data management facility through the data quality tool. **∞ BI Strategy (Reporting & Analytics)**

### Key initiatives

- Undertake a project to re-design the interfaces that are used to provide data to OMS.
- Establish a source of property owner information that can be used to supplement our customer details.
- Establish a feedback channel for field crews and contractors through the Toughbook, smart phone or other devices that enables the simple transmission of structured information and multimedia to the office. **∞ Mobility Strategy**
- Review and improve the selection and transmission of job specific information to field crews, contractors and meter readers.
- Source additional information (as determined) about our customers to establish demographic, segmentation profiles and key dates to feed into our decision making processes. **∞ Customer Service Strategy**

### Key initiatives

- Define Single View of Customer(SVoC) data requirements **∞ Customer Service Strategy.**
- Review and improve data synchronisation methods, especially in relation to the cloud data replication processes. **∞ BI Strategy (Reporting & Analytics) & ITSP**
- Ensure data is of suitable quality for upcoming system replacements and/or CRM (Customer Relationship Management) implementations to simplify the data conversion effort. **∞ CIS OV Replacement Strategy**
- Ensure data is of suitable quality to expose to the public through online portals and other initiatives **∞ Customer Service Strategy**

### Success measures

- Data Quality tool implemented (1.2)
- Data KPIs and tracking functions identified and implemented (1.4)
- Effective communication channels to and from the field established (1.5)
- Data management function within Customer Relations identified and implemented (1.1)
- Additional capability for data management added to data quality tool (3.3)
- Process defined and implemented for the management of NMI-SP link by Customer Relations (4.1)
- Data integration methods between corporate systems and cloud repositories are progressively improved (6.1)
- Data governance framework established and is an effective control of customer data (1.3)
- Sources of additional customer information identified and data made available for decision making (5.4)
- New customer data issues resolved and KPI targets achieved (2.3)
- Property ownership information source identified and data integrated with our customer data (5.2)
- Feedback channel established and requests completed within 24 hours (5.3)

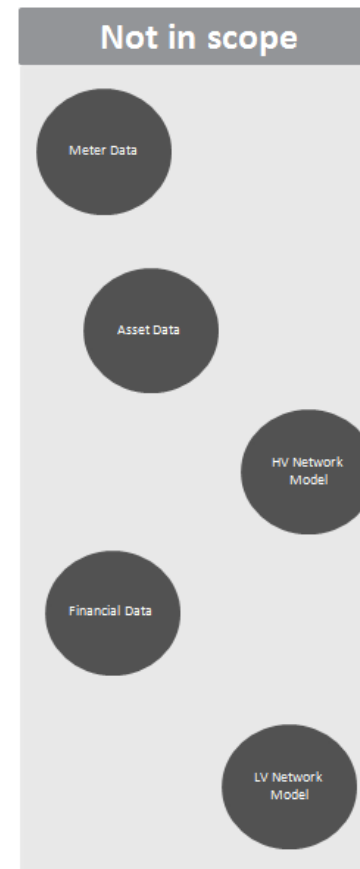
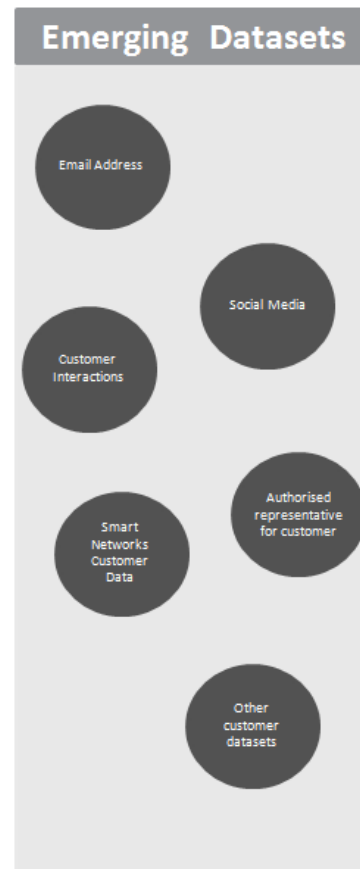
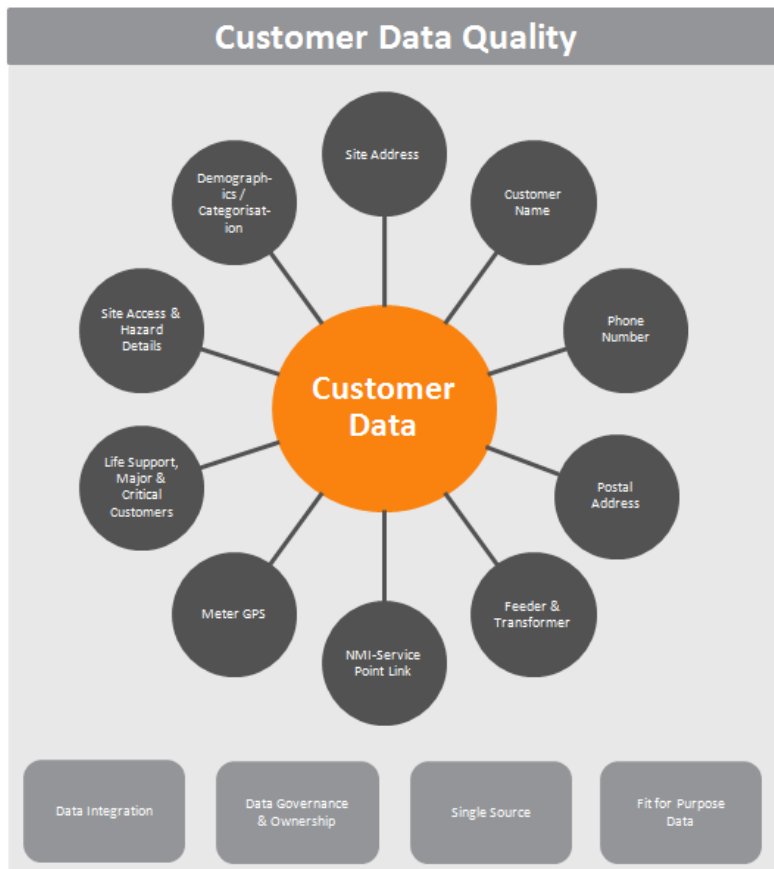
# **Customer Data Quality Plan 2015-2020**

# Scope

The scope of the Customer Data Quality Plan is primarily limited to the datasets that describe the key attributes of our customers. Personal information, such as name and phone numbers, details of where the customer resides and particulars relating to their personal circumstances and accessibility of their property are all included under our 'Customer Data' banner.

Other datasets in the scope of this plan sit at the convergence of the customer and the distribution network, such as the NMI-Service Point link. This data has a high impact on the interactions we have with customers and therefore must be closely monitored to ensure a continual high degree of accuracy.

Excluded from the scope of the Customer Data Quality Plan is the network asset data, high and low voltage network models, financial and billing data



and meter data (the values recorded by the meter). These datasets do not directly relate to the customer, and in most cases the out of scope data is managed by an alternative data quality process.

Additionally, a number of emerging datasets have been identified that are not currently in scope but are becoming more prominent in our business and the wider utilities industry. It is expected these datasets will be added to the scope during the life of the plan and as the dataset matures.

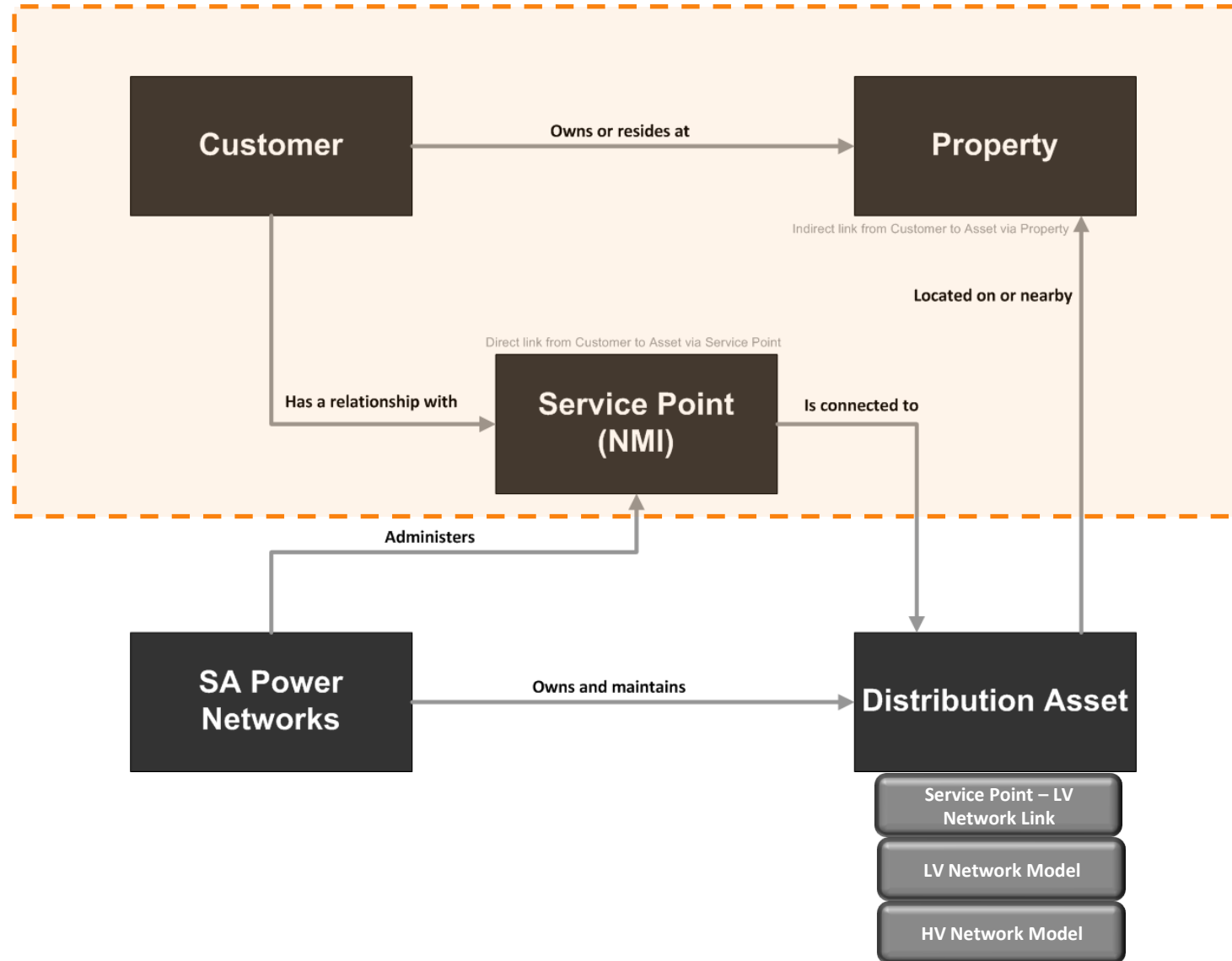
# Scope – Data Model

The data model viewpoint of the scope of the Customer Data Quality Plan illustrates the datasets and relationships that are in scope of this plan, as well as those that are excluded.

The key datasets (or entities) that are in scope are the 'Customer', 'Property' and the 'Service Point (NMI)'.

The relationships between the customer, property and service point as well as the data that defines those relationships and ties them to a distribution network asset are all in the scope of this plan.

As outlined previously, the asset data including the high and low voltage network models is out of the scope of this plan.





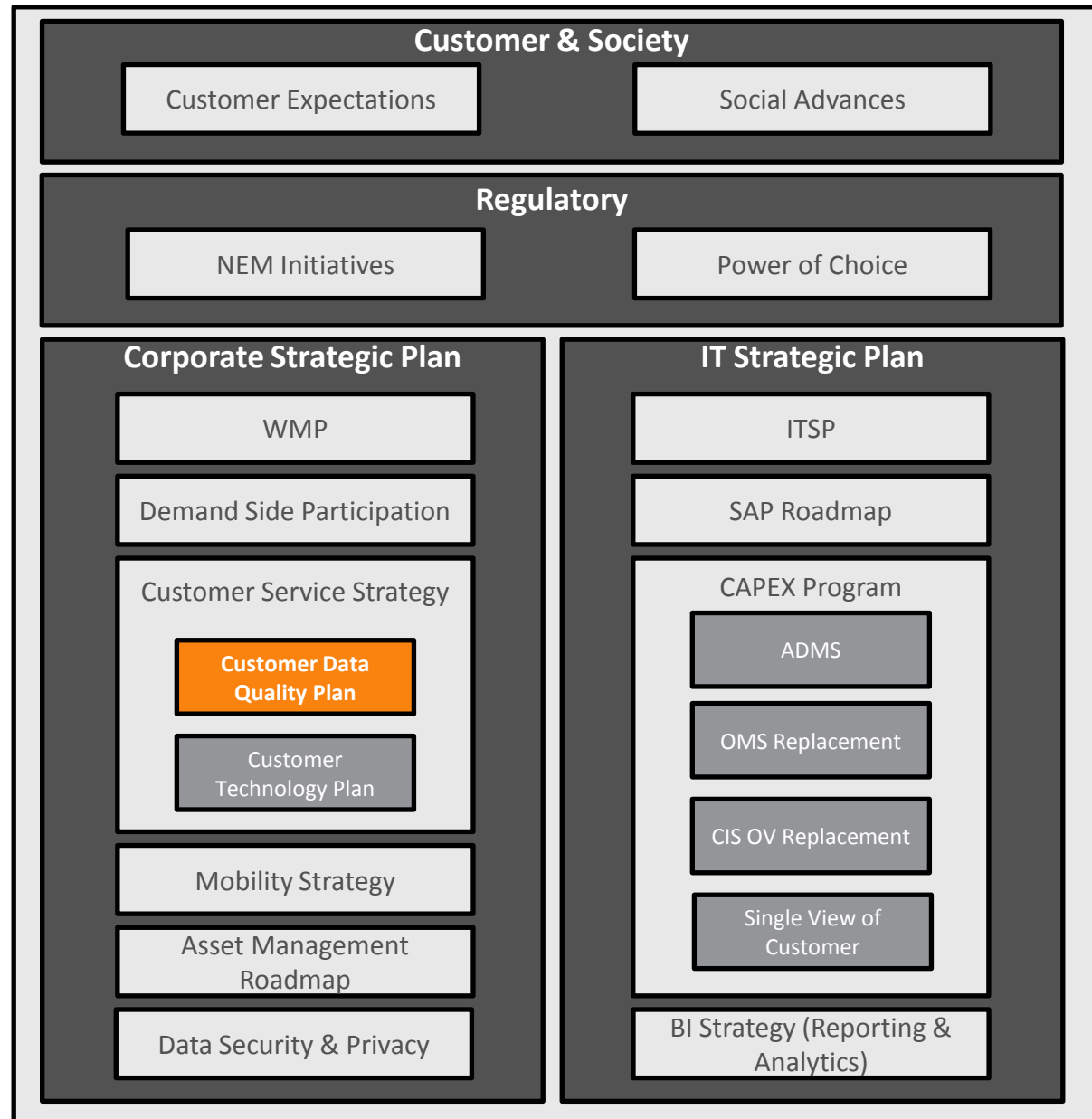
# Related change environment

The Customer Data Quality Plan is just one of a number of change programs currently underway at SA Power Networks. It is positioned as a component of the Customer Service Strategy, which in turn is guided by the Corporate Strategic Plan and Strategic Framework.

Complementing the Corporate Strategic Plan initiatives are a number of IT programs which address immediate IT requirements or establish long term plans to provide the organisation with the capabilities to operate effectively in the future.

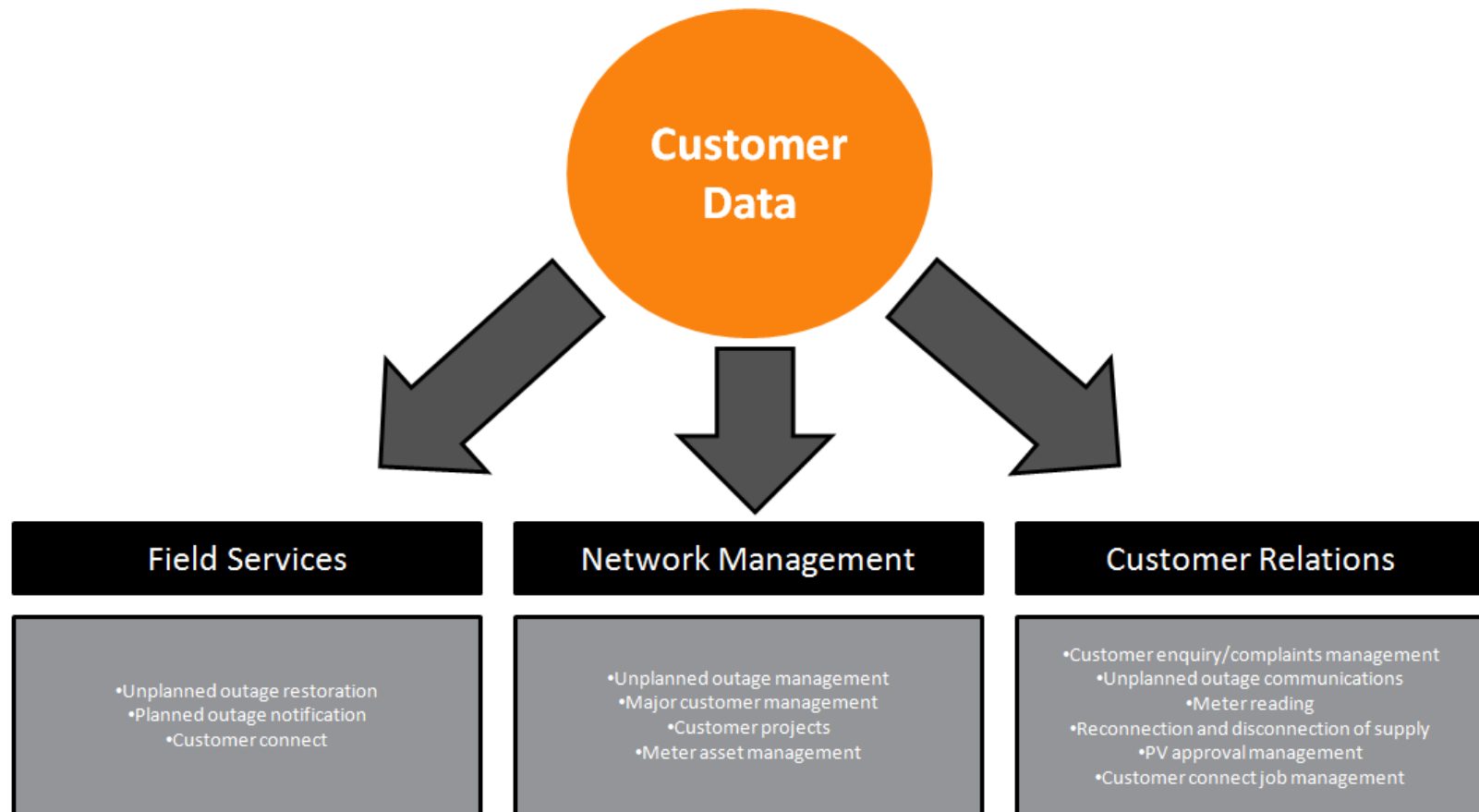
The key external contributors to change are regulatory initiatives either through National Market improvement initiatives or government driven industry reforms such as Power of Choice. The changing expectations of the customer and the continual advancement of society also influences the environment in which we are operating.

These change programs all have linkages to customer data and must be monitored to ensure there are no adverse impacts on the quality of information we manage.



# Major consumers of customer data

The usage of customer data is not restricted to the Customer Relations Department, which is primarily responsible for its input and maintenance. Customer data is also an important component of many business processes carried out by Field Services and Network Management. These two groups are key stakeholders in the work we do to improve the quality of our customer information. The diagram below illustrates some of the key customer data consuming processes in each of the three departments with the most reliance on quality customer data.



# Overarching improvements

*Provide the appropriate level of governance, structure and toolsets to enable our data to be managed and improved effectively*

## WHAT IS IT ABOUT?

- Currently there are no formal policies relating to the management and improvement of customer data.
- An in-house developed property address management tool has been in use for the past 4 years but it is not adaptable to the changing needs of the data management function or expandable to other elements of customer data.

## HOW CAN WE IMPROVE?

- Develop policies, procedures, roles (ownership) and structure around the management of our customer data.
- Implement best practice data management capability for our customer data, learning from the experiences of utilities in Australia and the more mature organisations in Europe and the USA.
- Implement an adaptable technology product to support our current and future customer data management and improvement efforts.
- Continue to develop the customer-asset data model and further document our customer data.
- Ensure our customer data management practices comply with the relevant regulatory and legislative instruments.

## INITIATIVES

- Develop and implement a data governance framework to encompass customer data management and maintain linkages and alignment to the Network Asset data governance program.
- Implement a Data Quality tool to enable the following capabilities: **∞BI Strategy (Reporting & Analytics)**
  - Identification and resolution of data issues
  - Identification and tracking of key data quality metrics
  - Management of a repository of information describing each piece of data, any pseudonyms, any related rules, the data source and the context it should be viewed in.
- Develop and implement a resourcing plan to define roles and responsibilities relating to customer data management and to enable the objectives of this plan to be achieved.
- Implement a training plan to ensure resources are appropriately skilled in their data management functions and the toolsets they use.
- Develop a communication plan for field crews to educate and promote achievements with customer data quality and receive feedback in relation to current data issues.

## SUCCESS MEASURES

- 1.1 – Customer data management function and structure within Customer Relations identified and implemented
- 1.2 – Data Quality tool selected and progressive implementation of capability commenced
- 1.3 – Data governance framework and KPIs established and is an effective control of customer data
- 1.4 – Customer data KPIs and tracking functions identified and implemented
- 1.5 – Effective communications channel to and from field crews established

## SCOPE COVERAGE

- Data governance & ownership



# Communicating with our customers

*Provide high quality information to our systems and processes that facilitate effective communications and interactions with our customers*

## WHAT IS IT ABOUT?

- Accurate customer information is critical if we are to be successful in our efforts to proactively communicate with our customers or respond to their requests.
- Our customer information is currently obtained from retailers through the Customer Details Notification (CDN) B2B transaction.
- Automated business processes such as unplanned outage management, planned outage management and GSL (Guaranteed Service Level) payments are heavily reliant on the quality of customer information.
- The number of processes and degree of reliance on quality data is rapidly increasing and expected to continue to do so over the next 10 years.

## HOW CAN WE IMPROVE?

- Currently, our customer data is not actively managed. We are totally reliant on the information from the retailers which has historically been of poor quality. Our scope of data quality improvement needs to be expanded to include this customer information.

## INITIATIVES

- Establish a team that is dedicated to managing the customer information received from retailers. ∞ *BI Strategy (Reporting & Analytics), PAL SLA & National Electricity Market Initiatives*
  - Actively manage retailers to ensure correct customer information is provided in a timely manner.
  - Maintain a series of performance metrics that can be used to support any issues raised to retailers, AEMO (Australian Energy Market Operator) and the AER (Australian Energy Regulator).
  - Analyse and report on customer data issues and escalate to retailers, AEMO and the AER through the appropriate channels.
  - Consolidate customers to a single customer record where appropriate.
- Review business rules for CDN data processing to ensure maximum value is obtained from this data source.
  - Explore rules for partial acceptance of this transaction
  - Verify handling of customer changes that occur without a move in/out service order.
- Supplement the retailer provided customer details with information provided by 3<sup>rd</sup> parties ∞ *BI Strategy (Reporting & Analytics)*
  - Validate and enhance our current data set using externally sourced information

## SUCCESS MEASURES

- 2.1 – Customer data management team established
- 2.2 – Customer data KPIs identified and tracking and reporting established
- 2.3 – New customer data issues resolved and KPI targets achieved

## SCOPE COVERAGE

- Customer Name
- Phone Number
- Postal Address
- Data Integration





# Locating our assets and customers

*Maintain a high quality record of location information to enable our assets and customers to be found*

## WHAT IS IT ABOUT ?

- Accurate information about the properties our assets are located on and where our customers reside ensures we are able to locate them when required for maintenance and fault finding .
- Property address information is maintained by SA Power Networks and we are responsible for the provision of accurate information to other NEM (National Electricity Market) participants.

## HOW CAN WE IMPROVE?

- There is currently a large backlog of legacy address data issues that remain unresolved and a large number of updates still required due to the rollout of Rural Property Addressing across the state. A concerted effort is required to be made to resolve the majority of these issues and enable the data quality focus to be expanded to other areas.
- GPS coordinates have now been captured for most of our country meters and are regularly obtained as part of our service order field work. This information is not analysed to enable new or improved meter locations to be added to the system or to catch errors from entering the system. This function needs to be added to maintain the integrity of our GPS information.

## INITIATIVES

- Temporarily expand the team of people who are working to correct our addresses to enable the backlog of corrections to be processed within 12-18 months.
  - The addition of 6 temporary employees will enable this to be achieved
- Establish a facility to manage a single source of addressing reference information and processes to maintain it and make it available to other systems to validate data entry. **∞ITSP**
- Develop a reporting and error identification process to analyse the GPS coordinates we are starting to receive from a multitude of sources. Coordinates will need to be manually assessed in some cases to determine if an improved meter location can be updated in the system. **∞ BI Strategy (Reporting & Analytics)**
- Establish a project to reconcile and cleanse the addressing data we are responsible for in MSATS **∞NEM Compliance**
- Transition the process of address correction to the new data quality tool. **∞ BI Strategy (Reporting & Analytics)**
- Add location and hazard management data elements to the data quality tool and resource the management of this data as appropriate. **∞ BI Strategy (Reporting & Analytics)**

## SUCCESS MEASURES

- 3.1 – Property addressing issues reduced to a manageable volume
- 3.2 – Current address management process implemented within new data quality tool
- 3.3 – Additional capability for data management added to data quality tool

## SCOPE COVERAGE

- Site Address
- Meter GPS
- Site Access & Hazards
- Single Source



# Managing the connectivity of customers to the distribution network

*Manage the critical link that associates our customers with our network assets*

## WHAT IS IT ABOUT ?

- The connection of a customer to the distribution network is achieved in the corporate systems through the establishment of a link between the NMI and service (connection) point. This link identifies which network assets are required to provide supply to the customer and can be traced through the network model, back to the substation.
- The NMI-SP link is a critical piece of information in many processes including planned outages, unplanned outages, asset inspection and service orders.
- The impact of incorrect linking on a single job can result in thousands of dollars and many hours wasted chasing issues that don't exist.
- The current real time analysis undertaken during power outages relies heavily on correct NMI-SP links so the location and extent of an outage can be predicted. This reliance only increases in the future as plans for automation are implemented.

## HOW CAN WE IMPROVE?

- For such a critical piece of information there is little in the way of formal controls and management of the information. This is required to ensure the ongoing accuracy of this data.
- A process to link new customers to the network that is timely and effective needs to be established

## INITIATIVES

- Establish responsibility in Customer Relations for the creation and establishment of the NMI-SP link at the point where the new connection is processed.
- Establish responsibility in Customer Relations for the creation and correction of NMI-SP links for Life Support, Major and Critical customers. *∞ADMS Stage 2*
- Establish responsibility for correction of NMI-SP links with Customer Relations and resource a team of temporary employees to process corrections. This can be coordinated with the resourcing requirement for the address correction activity. Priorities need to be considered between country, metro and business/community customers.
- Establish a NMI-SP data management facility through the data quality tool. *∞ BI Strategy (Reporting & Analytics)*

## SUCCESS MEASURES

- 4.1 – Process defined and implemented for the management of NMI-SP link by Customer Relations.
- 4.2 – KPI defined and achieved for New Connections with NMI-SP link established.
- 4.3 – Resourcing requirement for NMI-SP link management identified and fulfilled.

## SCOPE COVERAGE

- NMI-Service Point Link
- Life Support, Major & Critical customers
- Feeder & Transformer



# Providing information between the field and office

*Facilitate the bi-directional flow of information between the field and corporate systems to establish a continuous data improvement feedback loop*

## WHAT IS IT ABOUT?

- The data used for dispatching supply restoration and planned work jobs to the field crews may be up to 3 months outdated. This means that any data corrections or new information is delayed reaching those who need it most. As data is not synchronised between systems it can cause confusion and distrust among employees.
- For work types that are focussed on our assets, such as line inspection of feeders, the hazard and property access information associated with customer are not attached to the work. Gaps exist where our assets are located on a property but there are no connection points.

## HOW CAN WE IMPROVE?

- As the need for timely, accurate data increases it is no longer acceptable to tolerate a data transfer process that results in data that is months outdated. An update to the data transfer method and business rules is required to improve this situation.
- Alternative sources of data are required to provide better information to the field as well as being able to source data from a job site to provide back to the office.

## INITIATIVES

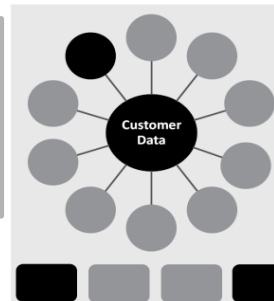
- Undertake a project to re-design the interfaces that are used to provide data to OMS. The solution should allow independent updates of customer, property and network data.
- Establish a source of property owner information that can be used to supplement our customer details and take their place for properties containing our assets but no connection point.
- Establish a feedback channel for field crews and contractors through the Toughbook, smart phone or other devices that enables the simple transmission of structured information and multimedia to the office to assist office resources with updates to the corporate systems. Part of the feedback should provide notification to the initiator that a request has been actioned. [↻ Mobility Strategy](#)
- Review and improve the selection and transmission of job specific information to field crews, contractors and meter readers to ensure the most relevant information is included and prioritised appropriately.
- Source additional information (as determined) about our customers to establish demographic, segmentation profiles and key dates to feed into our decision making processes in the office and field. [↻ Customer Service Strategy](#)

## SUCCESS MEASURES

- 5.1 – Customer and property information within OMS and SAP CNS are aged by no more than 7 days
- 5.2 – Property ownership information source identified and data integrated with our customer data
- 5.3 – Feedback channel established and requests completed within 24 hours
- 5.4 – Sources of additional customer information identified and data made available for decision making

## SCOPE COVERAGE

- Categorisation/Demographics
- Data Integration
- Fit for purpose data



# Enabling and supporting our future plans

*Build a solid foundation of accurate data to enable our future plans for proactive communication, automated processes and visibility of the current state of work*

## WHAT IS IT ABOUT?

- To be proactive and to automate business processes our corporate systems are required to make decisions based on defined business rules and the data available to the system. If the rules are poorly defined or the data is of poor quality then the resulting decisions made by the system will also be poor.

## HOW CAN WE IMPROVE?

- We need to ensure all corporate systems are using the same set of consistent information. The rules and mechanism for transferring and integrating data between systems needs to be reviewed and improved.
- Customers want current, up to the minute information. Customers place high value on the move in/out processes as they are usually associated with the stressful situation of moving house. Our involvement in these situations can be improved to provide current information about the scheduling and completion of these jobs.
- When a new initiative is proposed it is important for the project stakeholders to have a clear understanding of the data required and the current quality of the data as it will impact the delivery of the project benefits. Information about the quality of data needs to be readily available as well as the planned timeframes for correction to a state that is fit for purpose.

## INITIATIVES

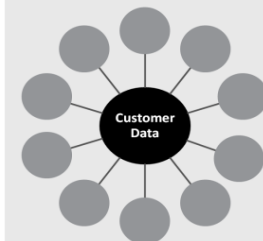
- Single View of Customer (SVoC) **∞Customer Service Strategy**
  - The implementation of a single customer view provides a significant benefit enabling the capability to visualise all of the information relevant to a customer, sourced from multiple systems, all on a single display. In order for the relevant information to be obtained and the benefit of this product to be received the data it relies on must have a high degree of accuracy. Data must be improved from its current state before this product is implemented.
  - Integration with Smart Grid systems to enable events from intelligent assets to be captured and acted upon.
  - Implementation of real time interfaces for move in and move out transactions to enable visibility of the current state of work.
  - Obtain location based information about work occurring on network assets in the vicinity of a customer’s residence for presentation in the SVoC.
- Data Synchronisation methods must be reviewed and improved, especially in relation to the cloud data replication processes. **∞BI Strategy (Reporting & Analytics) & ITSP**
- Ensure data is of suitable quality for upcoming system replacements and/or CRM (Customer Relationship Management) implementations to simplify the data conversion effort. **∞CIS OV Replacement Strategy**
- Ensure data is of suitable quality to expose to the public through online portals and other initiatives **∞Customer Service Strategy**

## SUCCESS MEASURES

- 6.1 – Data integration methods between corporate systems and the cloud repositories are progressively improved
- 6.2 – Data requirements for the SVoC are identified and a plan for their improvement is created and executed
- 6.3 – Data requirements for public exposure are identified and a plan for their improvement is created and executed

## SCOPE COVERAGE

- Fit for Purpose Data
- Data Integration





# Roadmap 2015-2020

- Early
  - Implement Data Quality tool (1.2)
  - Data KPIs and tracking functions identified and implemented (1.4)
  - Effective communication channels to and from the field established (1.5)
  - Current address management function implemented within new data quality tool (3.2)
  - Data management function within Customer Relations identified and implemented (1.1)
  - Data governance framework established and is an effective control of customer data (1.3)
- Mid-term
  - Customer data management team established (2.1)
  - Customer data KPIs identified and tracking established (2.2)
  - Data requirements for SVoC are identified and a plan for their improvement is created and executed (6.2)
  - Data requirements for public exposure are identified and a plan for their improvement is created and executed (6.3)
  - Property addressing issues reduced to a manageable volume (3.1)
  - Additional capability for data management added to data quality tool (3.3)
  - Process defined and implemented for the management of NMI-SP link by Customer Relations (4.1)
  - KPIs defined and achieved for New Connections with NMI-SP link established (4.2)
  - Resourcing requirement for NMI-SP link management identified and fulfilled (4.3)
  - Data integration methods between corporate systems and cloud repositories are progressively improved (6.1)
- Long-term
  - New customer data issues resolved and KPI targets achieved (2.3)
  - Property ownership information source identified and data integrated with our customer data (5.2)
  - Feedback channel established and requests completed within 24 hours (5.3)
  - Sources of additional customer information identified and data made available for decision making (5.4)
  - Customer and property information in OMS is aged by no more than 7 days (5.1)



## Appendix 1 – Resource Requirements

Focus Area		2015/16	2016/17	2017/18	2018/19	2019/20	Total
Addressing Data Management	Temporary	6	3	0	0	0	9
	Permanent	0	0	0	0	0	0
	Current	4	4	4	4	4	20
Customer Contact Data Management	Temporary	0	0	0	0	0	0
	Permanent	0	3	4	4	4	15
	Current	0	0	0	0	0	0
Service Point Linking Management (Customer to Asset)	Temporary	2	0	0	0	0	2
	Permanent	2	2	2	2	2	10
	Current	0	0	0	0	0	0
Data Analysts	Temporary	0	0	0	0	0	0
	Permanent	1	1	1	1	1	5
	Current	1	1	1	1	1	5
Total - Additional	All Additional	11	9	7	7	7	
	Temporary	8	3	0	0	0	
	Permanent	3	6	7	7	7	
Total - Current		5	5	5	5	5	
Total - ALL		16	14	12	12	12	

# Document Information & Approvals

## Revision History

Date	Version	Author	Description of Change/Revision
05/02/2014	1.0	Craig Campbell	Final version for sign off
11/09/2014	1.1	Craig Campbell	Updated for inclusion in Price Reset submission for 2015-2020

## Approvals

Name and Title	Role	Signature and Date
Sonya Furey	General Manager Customer Relations	