

**SPI Electricity Pty Ltd**

**Advanced Metering  
Infrastructure**

**Revised Budget Application**

---

Public Version  
Submitted: 3 March 2011

### About SP AusNet

SP AusNet is a major energy network business that owns and operates key regulated electricity transmission and electricity and gas distribution assets located in Victoria, Australia. These assets include:

- A 6,574 kilometre electricity transmission network indirectly servicing all electricity consumers across Victoria;
- An electricity distribution network delivering electricity to approximately 620,000 customer connection points in an area of more than 80,000 square kilometres of eastern Victoria; and
- A gas distribution network delivering gas to approximately 572,000 customer supply points in an area of more than 60,000 square kilometres in central and western Victoria.

SP AusNet's purpose is 'to provide our customers with superior network and energy solutions.' The SP AusNet company values are:

- Safety: to work together safely. Protect and respect our community and our people.
- Passion: to bring energy and excitement to what we do. Be innovative by continually applying creative solutions to problems.
- Teamwork: to support, respect and trust each other. Continually learn and share ideas and knowledge.
- Integrity: to act with honesty and to practise the highest ethical standards.
- Excellence: to take pride and ownership in what we do. Deliver results and continually strive for the highest quality.

For more information visit: [www.sp-ausnet.com.au](http://www.sp-ausnet.com.au)

### Contact

This document is the responsibility of the Networks Strategy and Development Division, SP AusNet. Please contact the officer below with any inquiries.

Julie Buckland  
Director, Strategic Regulatory Programs  
SP AusNet  
Level 31, 2 Southbank Boulevard  
Melbourne Victoria 3006

Ph: (03) 9695 6606

## Table of Contents

<b>Executive Summary</b>	<b>5</b>
<b>1 Introduction</b>	<b>6</b>
1.1 Purpose	6
1.2 Background	6
1.3 Documentation relied upon	6
<b>2 SP AusNet’s AMI solution and Approved Budget</b>	<b>7</b>
2.1 SP AusNet’s AMI solution	7
2.2 Approved Budget	8
<b>3 Requirements of the Revised Order regarding an RB Application</b>	<b>9</b>
<b>4 SP AusNet Procurement, Sourcing and Contract Policy</b>	<b>10</b>
4.1 SP AusNet’s Procurement Model	10
4.2 SP AusNet’s requisition and contract framework	12
4.3 Procurement Controls and Approvals	13
4.4 Purchase path for sourcing	15
<b>5 Contract Management</b>	<b>16</b>
5.1 Contract Management Lifecycle	16
5.2 Contract Management Plan	17
5.3 Contract Management Tools	18
<b>6 AMI Program - Implementation of Procurement, Sourcing and Contract Management</b>	<b>19</b>
6.1 Introduction	19
6.2 Overview of AMI	19
6.3 AMI Program Vendor and Supplier System Landscape	19
6.4 AMI Governance Structure	20
<b>7 Summary of AMI Contracts</b>	<b>22</b>
7.1 Key Phases of Procurement and Contract	22
7.2 Procurement tendering and evaluation process	23
7.3 Example 1: WiMAX antenna procurement process	24
7.3.1 Description of AMI WiMAX antenna procurement process	24
7.4 Example 2: AMI Meter Installation Procurement Process	28
7.4.1 Description of AMI Meter Installation procurement process	28
7.5 AMI Program Index of Contracts	33

<b>8</b>	<b>Proposed Budget Variations</b>	<b>35</b>
8.1	Capital Expenditure	35
8.1.1	<i>Metering</i>	36
8.1.2	<i>Communications</i>	45
8.1.3	<i>Information and Control Services</i>	46
8.1.4	<i>Non IT Capital Expenditure</i>	47
<b>9</b>	<b>Proposed Revised Budget Summary</b>	<b>48</b>
<b>APPENDIX A</b>	<b>Procurement, Sourcing, Vendor and Contract Management Policies and Procedures</b>	
<b>APPENDIX B</b>	<b>AMI Contract Summaries</b>	
<b>APPENDIX C</b>	<b>AMI Contracts</b>	
<b>APPENDIX D</b>	<b>IT Cost Allocation Methodology</b>	

### Executive Summary

SP AusNet lodged an Advanced Metering Infrastructure (AMI) Initial Budget Application and a subsequent revision<sup>1</sup> to that application was lodged on 3 March 2009. In accordance with the requirements of the revised Order, the AER made its Determination in October 2009, establishing the Approved Budget to apply to SP AusNet for the initial AMI budget period.

In the period since the approval of SP AusNet's Initial Budget Application the AMI program has continued to develop and progress. Contracts have been signed, lead times established and many hours of IT systems development has been undertaken.

On the 31<sup>st</sup> August 2010 SP AusNet lodged with the Regulator its 2011 Revised Charges Application. This application indicated differences in expenditure in year on year and categories that had occurred in 2009 and were forecast to occur in 2010 and 2011. In accordance with the requirements of the Cost Recovery Order in Council SP AusNet is only allowed a 20% contingency to cover any year on year expenditure variations. In a large scale project there can be many reasons why expenditure varies and in SP AusNet's program these can be categorised into differing units costs (as a result of entering into a contract that was competitively tendered), differing volumes and timing differences of when the expenditure actually takes place. This Revised Budget Application provides the AER with the details and supporting information for the expenditure variations.

This Revised Budget Application on behalf of SP AusNet is made under clause 5F of the Amending Order in Council<sup>2</sup> (the revised Order) and seeks to vary SP AusNet's Approved Budget<sup>3</sup> for the Initial AMI Budget Period as approved by the Australian Energy Regulator (AER) in its Determination<sup>4</sup> of October 2009.

---

<sup>1</sup> SPA, '**AMI Initial Budget Application**', revised 3 March 2009.

<sup>2</sup> Victorian Government Gazette, '**Order in Council No S 314**', 25 November 2008.

<sup>3</sup> Approved Budget has the meaning defined in clause 2.1 of the revised Order.

<sup>4</sup> AER, '**Final Determination, Victorian AMI review, 2009-11 AMI budget and charges applications**', October 2009.

### 1 Introduction

#### 1.1 Purpose

This Revised Budget Application (the RB Application) on behalf of SP AusNet is made under clause 5F of the Amending Order in Council<sup>5</sup> (the revised Order) and seeks to vary SP AusNet's Approved Budget<sup>6</sup> for the Initial Advanced Metering Infrastructure (AMI) Budget Period as approved by the Australian Energy Regulator (AER) in its Determination<sup>7</sup> of October 2009.

#### 1.2 Background

Clause 5.2 of the revised Order requires that a distributor make an 'Initial AMI budget period budget application' for the period 1 January 2009 to 31 December 2011, by no later than 27 February 2009. SP AusNet lodged an AMI Initial Budget Application and a subsequent revision<sup>8</sup> to that application was lodged on 3 March 2009.

In accordance with the requirements of the revised Order, the AER made its Determination in October 2009, establishing the Approved Budget to apply to SP AusNet for the initial AMI budget period.

#### 1.3 Documentation relied upon

The following documentation has previously been submitted to the AER and as provided for under clause 5.3 of the revised Order will, where appropriate, be relied upon in support of this RB Application:

- 2011 Charges Revision Application – SP AusNet, 31 August 2010;
- Various SP AusNet responses to AER and ESC questions both pre and post the Draft Determination<sup>9</sup>, July 2009;
- AMI Revised Budget Application – SP AusNet, 28 August 2009;
- AMI Initial Budget Application – SP AusNet, 27 February 2009 (initial) and 3 March 2009 (revision);
- AMI Consultation Paper: Revised Framework & Approach (December 2008) Response – SP AusNet, December 2008;
- AMI Revised Pricing Proposal – SP AusNet, September 2008;
- AMI Reference Documentation – SP AusNet, September 2008; and
- AMI Pricing Proposal – SP AusNet, December 2007.

---

<sup>5</sup> Victorian Government Gazette, '**Order in Council No S 314**', 25 November 2008.

<sup>6</sup> Approved Budget has the meaning defined in clause 2.1 of the revised Order.

<sup>7</sup> AER, '**Final Determination, Victorian AMI review, 2009-11 AMI budget and charges applications**', October 2009.

<sup>8</sup> SPA, '**AMI Initial Budget Application**', revised 3 March 2009.

<sup>9</sup> AER, '**Draft determination Victorian AMI Review 2009-11 AMI budget and charges applications**', July 2009

## 2 SP AusNet's AMI solution and Approved Budget

### 2.1 SP AusNet's AMI solution

SP AusNet's preferred AMI solution and how it has been developed has been detailed in previous submissions to the AER. In summary, SP AusNet's solution is based on WiMAX technology, a standards-based wireless broadband technology, offering high-speed wireless access over long distances. Given the diversity of SP AusNet's customer base and unique geography of its service area, a single technology deployment is not considered economically feasible and therefore a Primary/Secondary/In-Fill approach has been developed.

Key components of the SP AusNet AMI solution include:

#### (a) Metering

AMI electronic interval meters are required to meet the functionality and service level requirements set out in the relevant specifications as well as other National Electricity Market metrology requirements. Meter requirements were sourced through a competitive tender process.

Meters will be WiMAX compatible in line with SP AusNet's preferred communications solution, and will meet the specification requirements referred to above including those of having a compliant Home Area Network (HAN) interface.

#### (b) Communications

SP AusNet's preferred solution is based on WiMAX as the best fit primary solution and a carrier led 3G solution as best suited for areas where WiMAX is not cost effective or efficient (Secondary Technology).

SP AusNet's WiMAX deployment strategy centres on a Build, Own and Operate model, maintaining ownership to ensure dedicated solution use and control over upgrades and migration planning. SP AusNet plans to utilise the expertise of existing WiMAX vendors for both design and deployment and will operate the network internally.

#### (c) Information and Control Services

The Information and Control Services (ICS) solution include the Network Management System (NMS) and other business system requirements.

##### *Network Management System*

Multiple vendor systems require the use of a NMS to interface with and manage individual vendor solutions and interconnect to other business critical components such as the metering revenue and outage management business systems. The NMS can perform a range of meter related functions such as engineering, inventory, planning, configuration, fault, performance management, security and accounting. SP AusNet proposes a NMS comprising two systems - a Meter Management System (MMS) and a Communications Network Management System (CNMS).

### Business Systems

Implementation of AMI, the increased meter and data volumes and functional complexity impact a distributor's Information Technology (IT) and back office systems. SP AusNet requires new IT systems and major changes to existing IT systems as part of the AMI solution.

## 2.2 Approved Budget

In preparing its Initial Budget Application, SP AusNet was cognisant of the requirements of the revised Order where clause 5B.1 states:

*'A budget application must:*

- (a) contain expenditure for Regulated Services for each year of the initial AMI budget period or the subsequent AMI budget period (as the case may be);*
- (b) set out the Total Opex and Capex for each year of the initial AMI budget period or the subsequent AMI budget period (as the case may be);*
- (c) distinguish between:*
  - i. capital expenditure; and*
  - ii. maintenance and operating expenditure; and*
- (d) relate the expenditure to scope.'*

In making a determination Clause 5C.1 requires that:

*'The Commission [now AER] must approve the Submitted Budget unless the Commission establishes that the expenditure (or part thereof) that makes up the Total Opex and Capex for each year:*

- (a) is for activities outside scope at the time of commitment to that expenditure and at the time of the determination; or*
- (b) is not prudent.'*

Table 2.1 below sets out SP AusNet's Approved Budget for the Initial AMI budget period as determined by the AER in its October 2009 Final Determination.

**Table 2.1: SP AusNet's Approved Budget**

(\$'000, Real 2008)

Total AMI Expenditure	2009	2010	2011	TOTAL
Total AMI Operating Expenditure	29,298	28,293	26,856	84,447
Total AMI Capital Expenditure	67,901	50,896	102,441	221,238
<b>Total Regulated Services Expenditure</b>	<b>97,199</b>	<b>79,189</b>	<b>129,297</b>	<b>305,685</b>



### **3 Requirements of the Revised Order regarding an RB Application**

Clause 5F and 5C of the revised Order sets out the requirements in relation to a revised budget application and the subsequent determination process. In particular, clause 5F.1 states:

*'A distributor may, at any time after the Commission makes a determination pursuant to clause 5C, notify the Commission of any actual or anticipated variance from its Approved Budget. The notification must set out all the information upon which the distributor relies.'*

while clause 5F.3 states:

*'The Commission must determine to approve or reject the variance in the Approved Budget giving reasons within 40 business days from receipt of notification. If the Commission does not make a determination within that time, the Commission is taken to have approved the variance.'*

SP AusNet understands clause 5F.3 to mean that in relation to any variations proposed as part of this RB Application the AER must make a determination to approve or reject the variation within 40 business days from receipt.

Clause 5F.4 of the revised Order states that:

*'In making a determination whether some or all of the variance of the Approved Budget is approved, clause 5C shall apply, all necessary changes being made, and with, in clause 5C.5 (b), '10 Business days' substituted for '20 Business Days'.*

Applying clause 5C.5 to a Revised Budget Application, the AER:

*'must make a draft determination approving or rejecting the Submitted Budget. If the Commission determines to reject the Submitted Budget:*

- (a) the Commission must in its reasons state what new Submitted Budget it would determine to approve; and*
- (b) the distributor must within 10 business days make application to the Commission for approval of an amended Submitted Budget.*

Applying clause 5C.2, SP AusNet understands that the AER must approve the variation unless it establishes that the expenditure (or part thereof) is for activities out of scope or that the expenditure is not prudent.

Clause 5I.2 states that in determining the building blocks, the Commission must include capital and operating expenditure for activities within scope "up to 120% of the Approved Budget for that year" during the Initial Budget period. This means that the 20% contingency amount applies to each individual year during the 2009-2011 period. In 2009, SP AusNet's total capital and operating expenditure were much lower than the Approved Budget and SP AusNet had also entered into contracts subsequent to the approval of the Approved Budget by the AER. These factors necessitated the lodgement of this RB Application.

### 4 SP AusNet Procurement, Sourcing and Contract Policy

The AMI program operate according to SP AusNet's Sourcing, Procurement and Contract Management policies which have been defined and administered by Logistics & Procurement (L&P). The relevant policies and procedures are defined primarily in the following documents:

- PTP00-121 Procurement Policy;
- PTP00-122 Procurement Manual; and
- PTP00-125 Procurement Contract Execution & Administration Procedure.

The AMI program has adopted and operates within the SP AusNet policy.

The following sections summarise the Sourcing Strategy, Procurement Models and Contract management procedures within SP AusNet.

#### 4.1 SP AusNet's Procurement Model

The SP AusNet procurement policy is defined and administered by L&P. The Procurement Model has been implemented by L&P based on principles which are outlined in the Procurement Manual, the principles include:

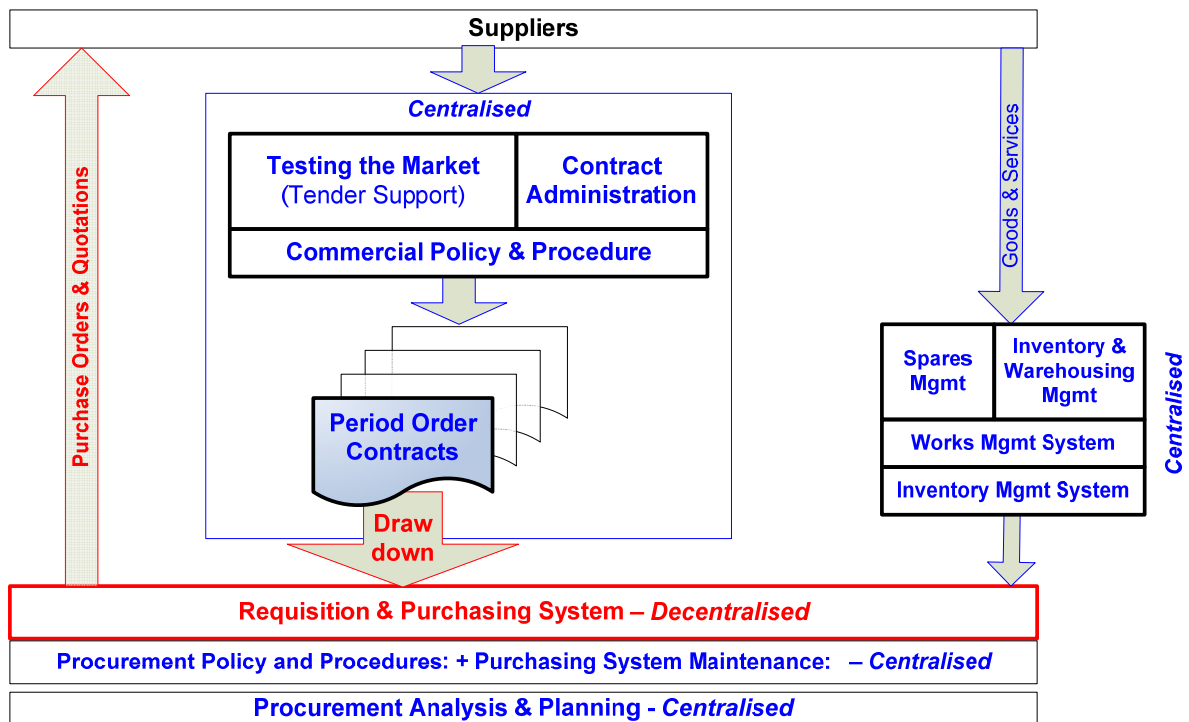
- the delivery of lowest cost, technically compliant offer;
- the facilitation of purchasing across all SP AusNet departments/ business units; and
- an auditable and traceable process.

#### SP AusNet's Procurement Operating Model

SP AusNet's end-to-end procurement operations are managed by the overarching Procurement Operating Model. This model identifies the key required capabilities and responsibilities under which all procurement activities must adhere. The Procurement Operating Model describes:

- Processes – The workflow associated across the various sourcing, procurement and contract management functions and capabilities, with the delineation of parties involved;
- People and skills – The definition of roles and responsibilities;
- Relationships – The relationship between business units, and external suppliers;
- Procurement Organisation – The definition of the organisational structure; and
- Management systems/tools – The tools and management systems used to support procurement operations.

A high level overview of this operating model is depicted in Figure 4.1.



**Figure 4.1: SP AusNet Procurement Operating Model**

The operating model contains a lot of detail but of particular relevance to the AMI program, are the following :

Approval to Purchase / Capital Expenditure Purchases

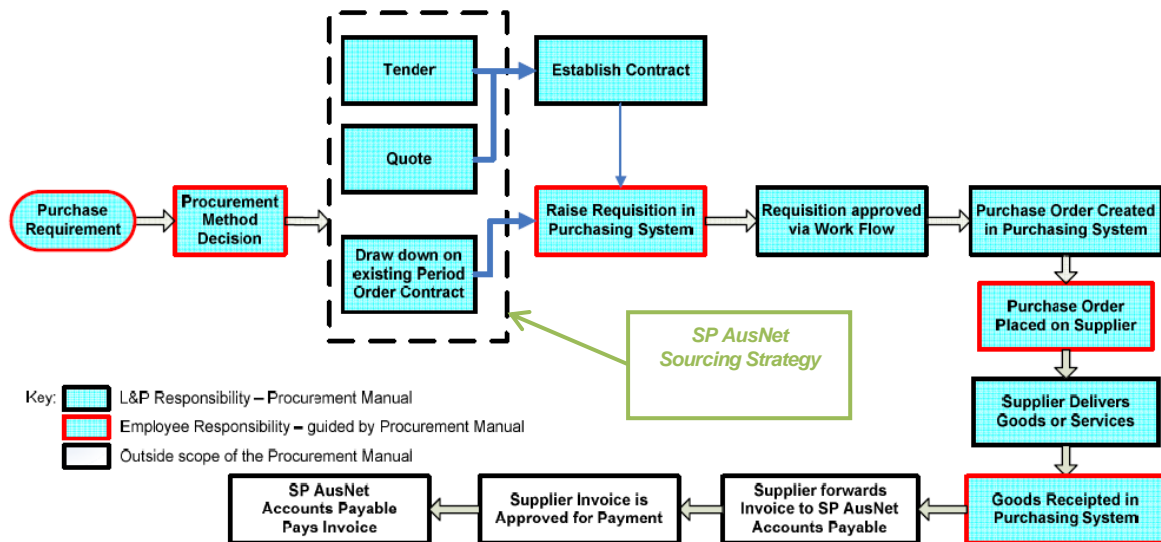
The Project Approval Committee will approve all Capital Expenditure. Upon approval of a project, the procurement of goods or services related to the project will be conducted within the Purchase Path Guidelines.

The Establishment of Period Order Contracts

Period Order Contracts (POC) are long term supply contracts that accommodate repetitive purchases. POCs are at the core of the procurement operating model.

### SP AusNet's Procurement to Pay Value Chain

Underpinning the Procurement Operating Model are numerous policies and processes. The overall procurement to pay process is described Figure 4.2.



**Figure 4.2: SP AusNet's Procurement to Pay Value chain**

In summary :

- The process is initiated with the identification of a Purchase Requirement;
- Sourcing options are identified using the SP AusNet Sourcing Strategy which for instance, allows either quotes to be obtained or a tender to be raised;
- L&P is responsible for establishing the contract allowing the employee to progress onto the purchasing process; and
- The value chain is then followed through to contract maintenance and invoice payments.

## 4.2 SP AusNet's requisition and contract framework

Each of the process steps identified in the Procurement to Pay Value Chain must adhere to the corresponding frameworks as detailed in the relevant procurement policies.

As raising a requisition and contract places a legal and financial obligation on SP AusNet, strict controls have been developed to manage this process. Figure 4.3 summarises the SP AusNet requisition and contract framework and is referenced from PTP00-121 Procurement Policy.

## AMI Revised Budget Application

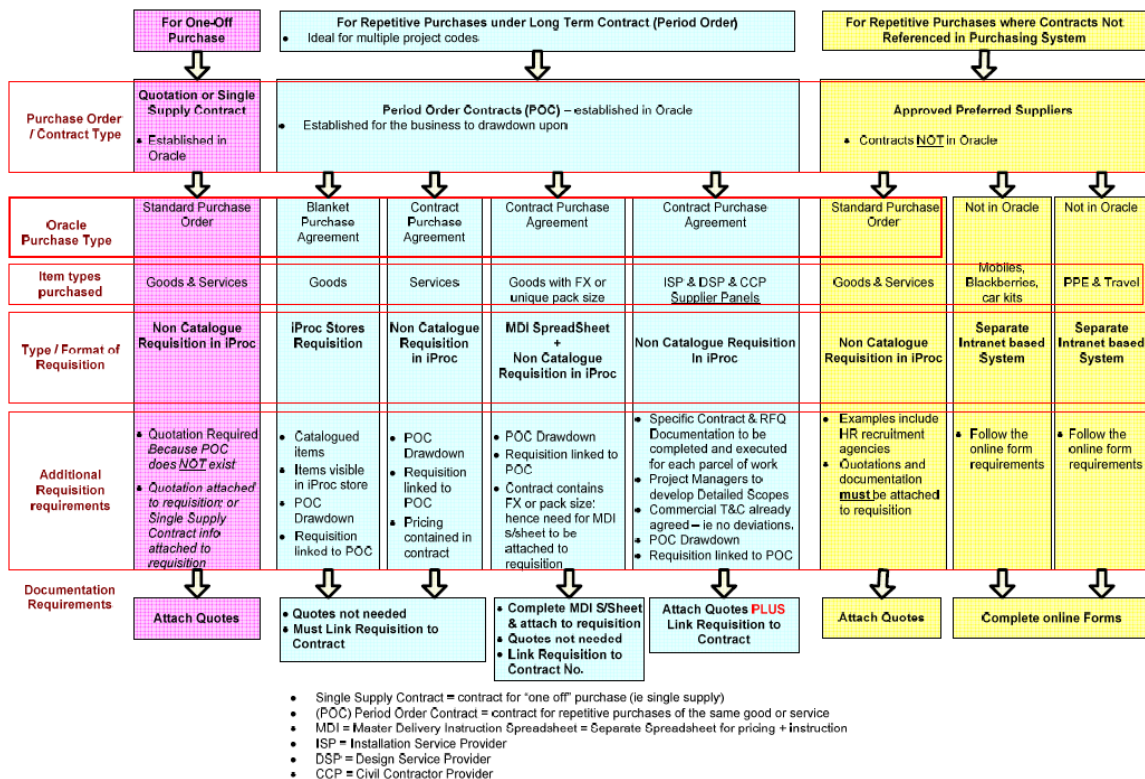


Figure 4.3: SP AusNet's requisition and contract framework

### 4.3 Procurement Controls and Approvals

#### Expenditure Approval Committee (EAC) Final Purchase Authorisations

In accordance with SP AusNet's requisition and contract framework, purchase requisitions must be approved by the EAC. The EAC is a group of SP AusNet representatives who evaluate and endorse requisitions for and on behalf of the Managing Director of SP AusNet, prior to the Managing Director's final approval.

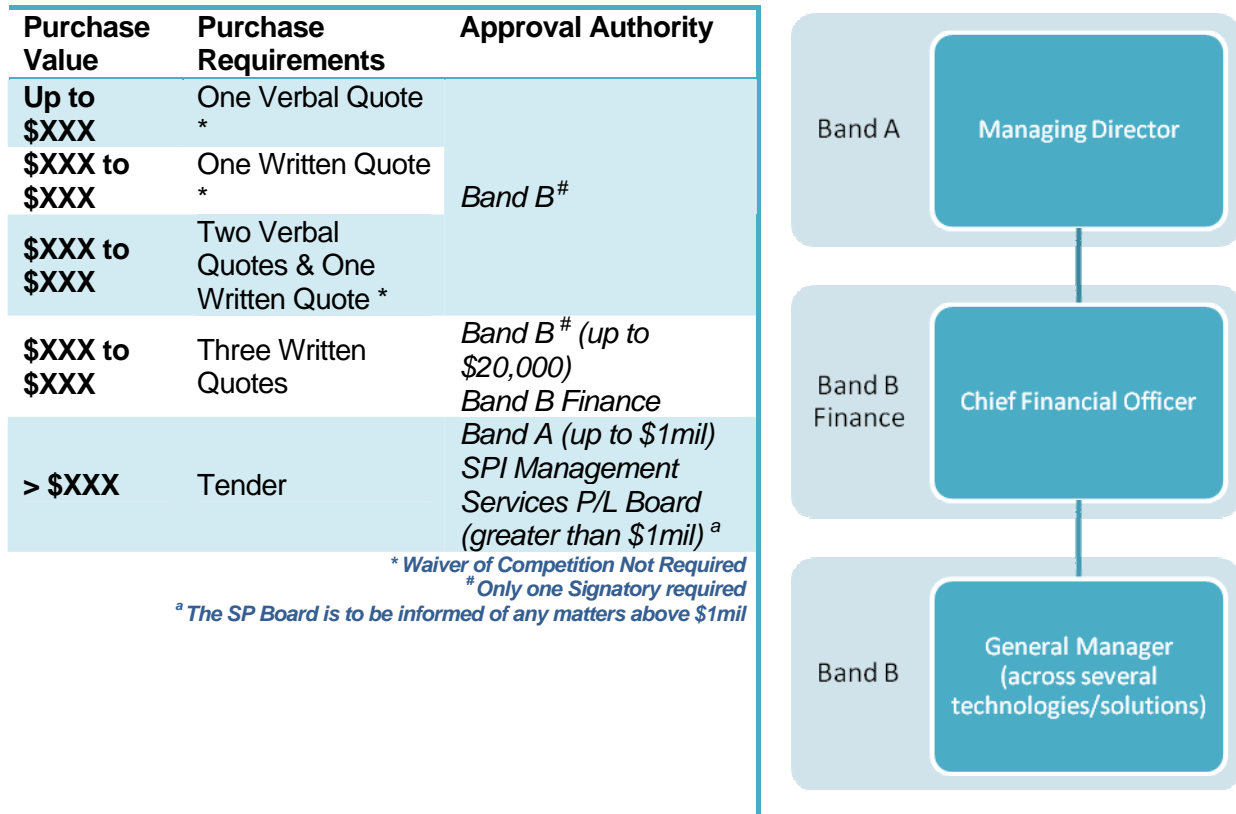
Upon receipt of the signed EAC Minutes, the EAC Procurement Officer has authority to action the pending requisitions. The EAC Procurement Officer will process approved requisitions into purchase orders / contracts, or reject unapproved requisitions.

#### Approval Limits

Dependent on the value of goods and/or services to be purchased, there is a predetermined number of purchase requisites that are required. As described in Figure 4.4, these consist of a combination of verbal and written quotes for orders leading up to a value of \$XXXX and tenders for all purchases above this value.

Authorisation has been delegated to various levels of the organisation to expedite the approvals process for expenditure. The Authority Structure below also describes the delegated approvals required to authorise the purchasing process.

**Figure 4.4: SP AusNet’s purchase order value authority structure**



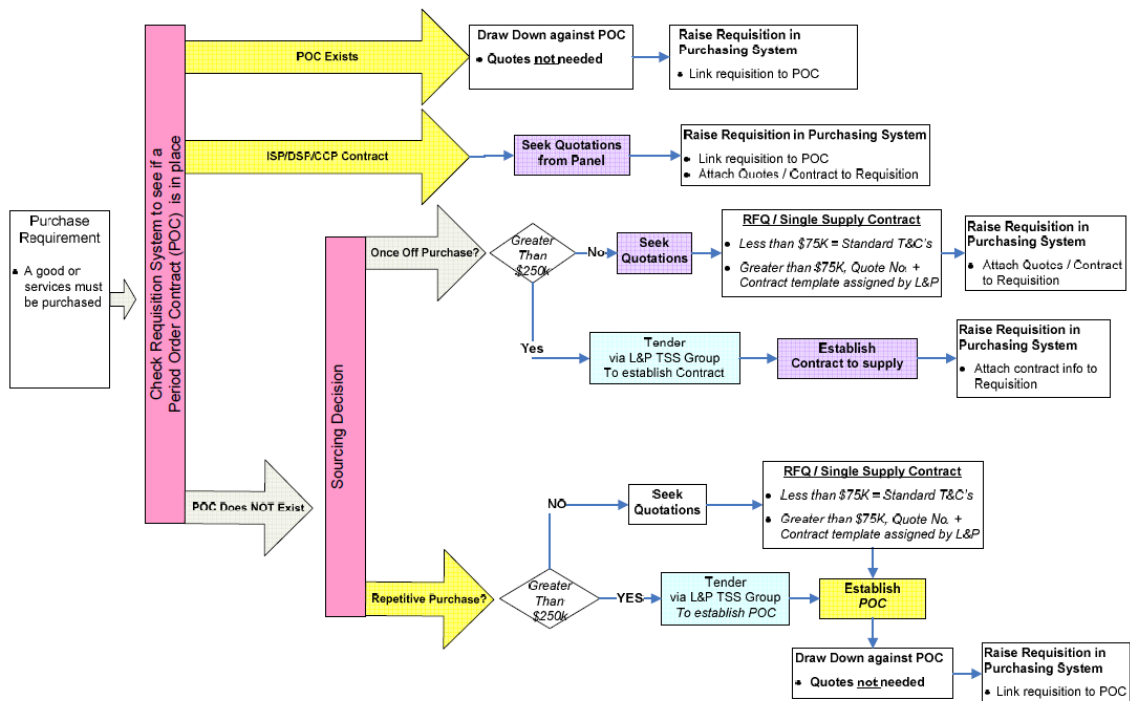
To facilitate adherence to these authority levels, SP AusNet uses online purchasing system(s) with built in work flow capability to manage the online approval or purchase requisitions and orders. These systems build in the authority levels detailed in Figure 4.4.

**Waiver of Competition**

In some limited cases a waiver of competition may be sought.

**4.4 Purchase path for sourcing**

As a further example of the detail that exists within SP AusNet's' procurement process, Figure 4.5 depicts the detailed decision tree logic that is used when there is no existing Period Order Contract (POC). For existing POCs, a requisition is raised which draws down against the POC except when ordering from a service provider on SP AusNet's Approved Service Provider Panel.



**Figure 4.5: Decision Tree for Sourcing Strategy**

## 5 Contract Management

In this section, SP AusNet's contract management processes and tools are detailed. These processes and tools form the basis for the development and management of all of the 26 contracts within the AMI program.

### 5.1 Contract Management Lifecycle

Contracts are created once a procurement decision has been executed and a supplier has been awarded the contract to provide the goods or services. The lifecycle of a contract has several owners as outlined in Figure 5.1.



**Figure 5.1: Owners of a Contract Through its Lifecycle**

L&P is responsible for managing and monitoring contracts. A Contract Administrator registers the contract into Lotus Notes and updates Oracle Financials. The administrator also organises the administration of the contract and its signatures. Finally, the contract administrator stores the contract securely in the contract management repository.

The Contract Manager is responsible for management of the vendor or supplier's performance and delivery of the contracted goods or services. Depending on the complexity and value of the contract, the contract management's requirements will increase relative to these factors.

#### **Benefits of SP AusNet's contract management process**

By implementing a consistent, and repeatable contract management process, SP AusNet aims to achieve the following benefits:

- proactively manage the contract;
- monitor the performance of the supplier;
- undertake responsibilities as a customer;
- ensure honesty and transparency;
- develop and maintain good relationships;
- communicate effectively and provide feedback; and
- manage risks.



### 5.2 Contract Management Plan

The Contract Management Plan (CMP) is an important contract management control mechanism used by SP AusNet. The CMP is generally developed or commenced by the Category Management Lead for high complexity and/or high value procurements during the acquisition planning phase and addresses the key issues related to managing the contract and achieving the specified objectives.

The Contract Management Plan guidelines state all necessary information that is required to enable the Category Management Lead to effectively manage the contract. This may include details regarding:

- acceptance criteria;
- communication and relationship management;
- completion and renewal arrangements;
- continuous improvement;
- contract changes and variations;
- contract deliverables;
- contract management meetings;
- data and information management;
- dispute resolution processes;
- ethical conduct;
- financial management;
- governance structures;
- inspection and testing procedures;
- insurances;
- key success factors or performance indicators;
- payment milestones;
- performance monitoring and reporting;
- quality assurance practices;
- risk management;
- schedule management;
- statutory and regulatory requirements;
- training; and
- warranties.

The contract management requirements progressively increase in accordance with the complexity and value of the contract. For example, simple low complexity, low value contracts may require little more than monitoring, basic record keeping and payment authorisation. More complex or strategic contracts of higher value will generally require:

- an active role for the contract manager and category management lead;
- the development of more strategic and comprehensive relationships with suppliers;
- more communication; and
- more comprehensive performance evaluation mechanisms.

The Contract Management Matrix provides guidance on the activities to be undertaken during the contract management period, for each procurement quadrant.

### 5.3 Contract Management Tools

SP AusNet has several tools that aid in contract management which include:

- *Sharepoint*: Document management system used for many project artefacts including policies, plans and registers. AMI uses this as an online repository to manage contracts;
- *iProcurement*: Purchasing System in which requisitions are raised and managed by the PMO Administration team;
- *Oracle Financials*: Record and reconciliation of contract spend; and
- *Lotus Notes Contract Register*: Also known as the “Contracts Register” used to manage contracts.

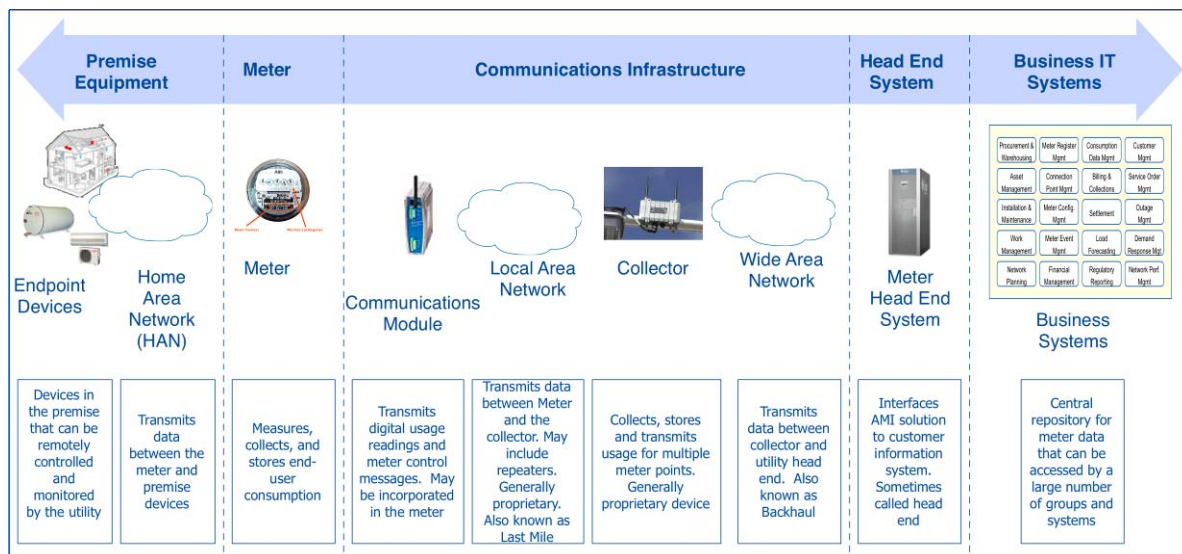
## 6 AMI Program - Implementation of Procurement, Sourcing and Contract Management

### 6.1 Introduction

The procurement and contract management processes and policies described in sections 4 and 5, form the basis for the AMI program. This section provides specific examples of how these processes and policies were used. As each of the AMI contracts had to adhere to the same processes and policies, rather than detail each contract, two examples have been documented. It is only by exception that contracts did not follow these standard processes. Any exceptions are documented in the individual contract summaries located in the appendices.

### 6.2 Overview of AMI

To provide context for the remainder of this section, a high level overview of the various components of the end to end AMI solution is depicted in Figure 6.1.



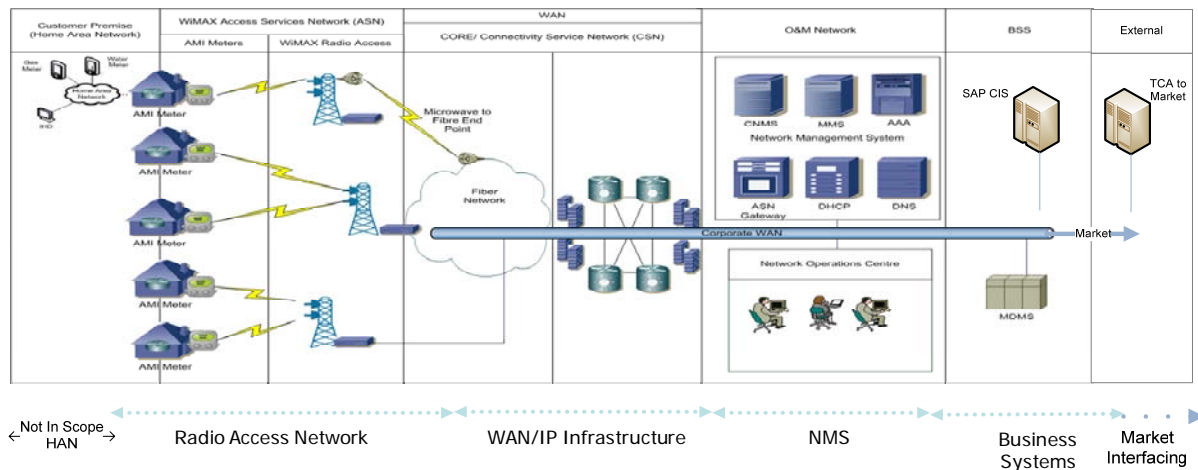
**Figure 6.1: High level AMI Components and Infrastructure**

### 6.3 AMI Program Vendor and Supplier System Landscape

The AMI Program includes a number of vendors, suppliers and services firms delivering one or many components or facets of the AMI program. In total, 26 contracts have been developed.

Figure 6.2<sup>10</sup> summarises the vendors and suppliers who provide the various components of the end to end AMI solution.

<sup>10</sup> Suppliers and vendors removed from diagram due to commercial-in-confidence agreements



**Figure 6.2: The AMI Program Solution Components**

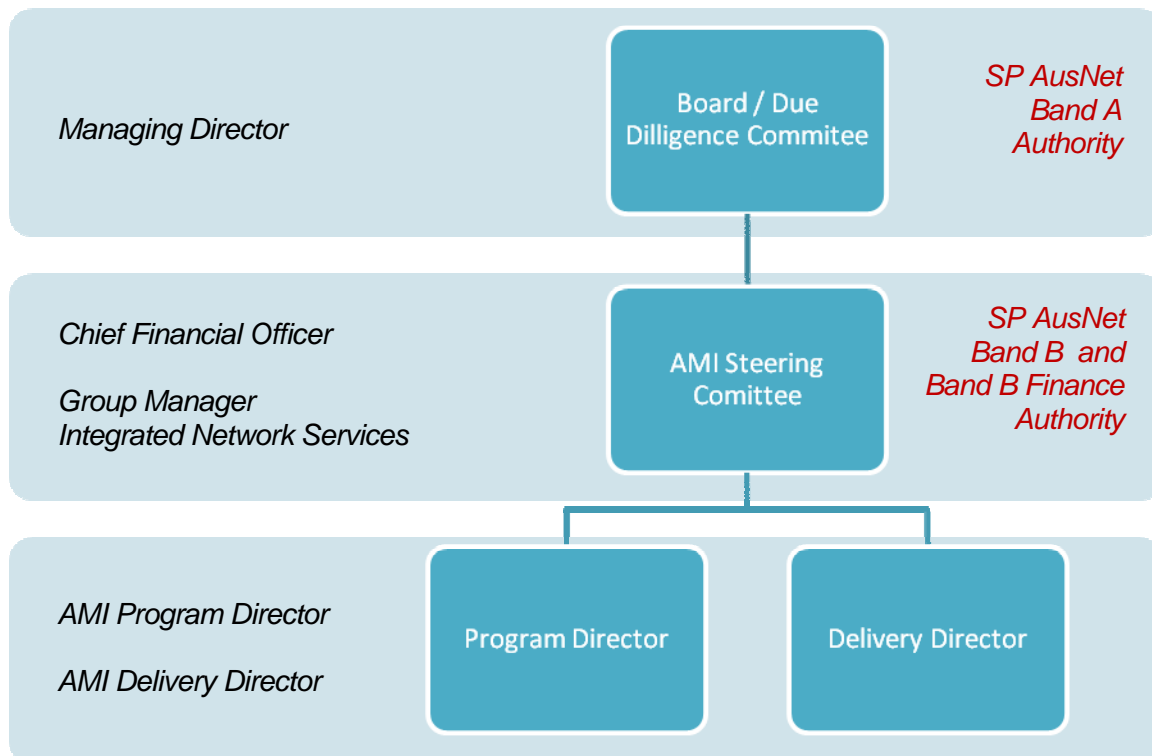
### 6.4 AMI Governance Structure

To oversee the implementation of the AMI program and the contracts developed and managed within it, a governance structure with accompanying reinforcement mechanisms has been implemented. This primarily consists of the following:

- AMI Steering Committee;
- Program Management Office and AMI organisational structure which includes specific procurement and contract management roles; and
- Leveraging SP AusNet's tools for example, iProcurement.

#### AMI Steering Committee

The AMI Steering Committee has the role to oversee the entire program on behalf of the SP AusNet Executive Management Team to consider, evaluate and select strategies to ensure compliance with all policies and procedures and appropriate management oversight of program costs, issues and risks arising from the Victorian Government's AMI initiative. Members will have line accountability for their respective components of the program.



**Figure 6.3: AMI Governance Structure**

Governance and approvals for the purchasing and sourcing of AMI program expenditure operate within the SP AusNet Procurement Policy.

Members operate according to their delegated authorities. All purchasing requests and decisions operate within the SP AusNet decision making framework to authorise expenditure and enter into contracts.

**AMI Program Management Office (PMO)**

The AMI PMO is responsible for administering contracts and tracking vendor performance. In addition, they are accountable for the conduct of procurement activities and adherence to SP AusNet’s procurement and contract management processes and policies.

The AMI program management team supports the Program Director in delivering the AMI Program on behalf of SP AusNet.

Within the AMI PMO a Vendor Manager and Contracts Consultant under the direction of the PMO Manager have been appointed to ensure the value of contract delivery, provide ongoing review and to liaise with the L&P team through all phases of the procurement and contract management lifecycle.

## 7 Summary of AMI Contracts

The majority of contracts have been developed for the AMI Program up until the end of November 2010. As noted previously, all AMI contracts must adhere to SP AusNet's procurement and contract management processes and policies as detailed in sections 4, 5 and 6.

This section provides detail of the overall key phases of procurement and contract that each AMI contract had to adhere to. In addition two examples of AMI contracts are provided to demonstrate how the contracts have been summarised.

### 7.1 Key Phases of Procurement and Contract

The sourcing strategy and procurement processes give rise to key phases for the purposes of summarising the entire sourcing and contract process which are outlined in Table 7.1.

A summary of each contract has been collated according to the key phases in Table 7.1 and are provided in Appendix B as individual attachments.

**Table 7.1: Key Phases of Procurement and Contract**

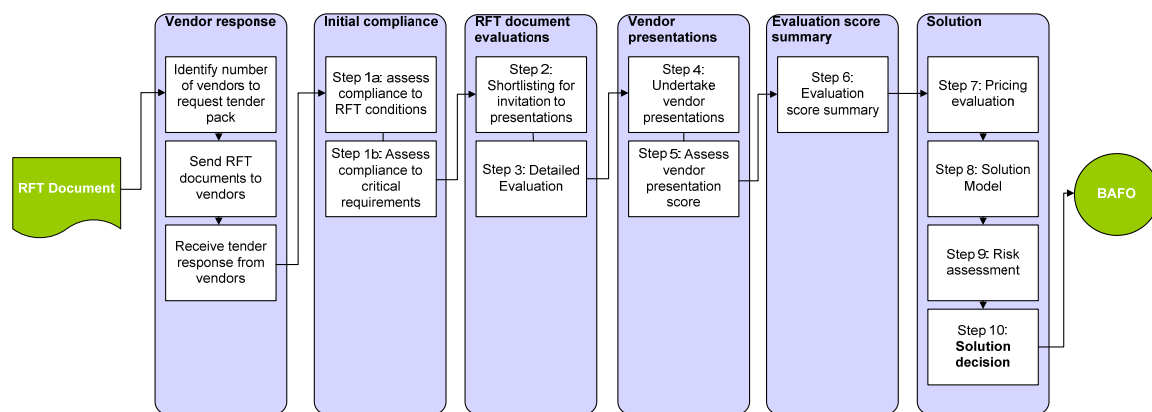
Phase		Activity ( <i>Procedure required to complete the phase</i> )
<b>Origination of contract</b>		What triggered the request for this contract
<b>L&amp;P</b> <i>phase selection depends on sourcing strategy</i>	<b>Tender Process</b>	A completed and signed approval to initiate tender exists
		Tender open date
		Who managed the opening of tenders
		Tender close date
		A Tender Evaluation Plan (TEP) has been developed for each tender conducted by SP AusNet prior to the tender close date.
		Contract signed
		After signed contracts with successful Tenderers, all unsuccessful Tenderers are advised they have not been awarded contract(s)
		Post Tender Review has been conducted
	<b>Quotation</b>	Purchasing Path followed based on the criteria listed
	<b>POC (Period Order Contract)</b>	Determine if a POC exists? (Note: if a POC exists followed normal process)
<b>Procurement Contract Execution &amp; Administration</b>		Registering the contract (or agreement) in the Lotus Notes Contract Register / AMI SharePoint register (Contract value greater than A\$75,000)
		Submitting the signed original contract to L&P Procurement Services for secure storage
<b>EAC (Approval)</b>		All supporting documentations are completed and attached to the Requisition, prior to submitting the Requisition for approval
		Contract approved
<b>Tender Documentation &amp; Storage</b>		Contracts have been filed according to procedures in regard to Electronic Storage; Original Contracts and Copy of the original contract

Phase	Activity (Procedure required to complete the phase)
<b>Requisition</b>	Raising a purchase requisition
	Requisition approvals (Online approval process by appropriate delegates)
<b>Varying Contracts</b>	Variation to contracts

The activities within each phase also denote the commencement and completion of these phases.

## 7.2 Procurement tendering and evaluation process

One of the key phases of procurement and contract described in section 4.1 is the tender process. By way of example, the detailed tender process used for a number of large value AMI tenders e.g. meter installation, communications, MDMS is depicted below in Figure 7.1. Although each tender had differing requirements, the intent was to follow this same process where it made practical sense.



**Figure 7.1: Procurement tendering and evaluation process for large value tenders**

In Sections<sup>11</sup> 7.3 and 7.4 SP AusNet has provided an overview of the procurement and contract development process and the contract management summary for two of the program's contracts.

The first example chosen is for the provision of WiMAX antennas and describes the procurement process followed. This is an example of a relatively small contract valued at approximately \$XXX million over XXX years.

The second example is for the provision of meter installation services and the tender process. This is an example of a significant contract valued at approximately \$XXX million.

<sup>11</sup> Please note all commercial-in-confidence information has been left blank intentionally.

## 7.3 Example 1: WiMAX antenna procurement process

### 7.3.1 Description of AMI WiMAX antenna procurement process

*Text in orange denotes capture points within the Contract Summary*

<p>Stage 1 - Sourcing Strategy Completed</p>	<p>The Delivery Stream lead in the AMI Program identified the need for WiMAX antennas as part of the AMI infrastructure requirements and initiated a process for the “Supply of WiMAX External Antennas”. Directed by the Logistics &amp; Procurement (L&amp;P) department and based on the sourcing strategy criteria, the need to undertake a Tender process was determined.</p>
<p>Stage 2 - Tender Request Completed and Signed</p>	<p>To initiate the tender process a Request for Tender was registered in the Lotus Notes Contracts Register. Through automated workflows, Lotus Notes ensures approval was obtained by L&amp;P and by the General Manager delegated authority for the AMI Program. Upon <b>General Manager –approval</b> having been obtained for the request, the Procurement Services Manager issued a unique reference number to trace the procurement process– “ITT 2010/T02”</p>
<p>Stage 3 - Tender Documentation Issued Stage 4 - Tender Closed</p>	<p>The following documents were prepared using the predefined SP AusNet templates:</p> <ul style="list-style-type: none"> <li>• Request for Information/Quote;</li> <li>• Scope/Statement of Work including technical specifications and background;</li> <li>• Draft contract (selected from AS/NZ Standard Contracts);</li> <li>• Bank Guarantee; and</li> <li>• Documents that need to be returned by the vendors eg schedule, statement of compliance</li> </ul> <p>On the <b>tender open date</b>, L&amp;P released the documents to the vendors and served as the main interface between SP AusNet and the vendors until the <b>tender close date</b>.</p>
<p>Stage 5 - Tender Evaluated</p>	<p>Copies of all tender submissions received by L&amp;P were distributed to the Technical Evaluation Team. These copies did not have the Schedule of Rates included so that the Technical Evaluation Team provided a view solely on the vendor’s technical compliance and ability. Simultaneously, L&amp;P evaluated commercial and contract deviations. The two teams clarified issues arising during this process with the respondents. Adjudication was performed based on weighting matrix of submissions – as defined in the Evaluation Plan.</p>



*Text in orange denotes capture points within the Contract Summary*

<p><b>Stage 6 - Contract Negotiated</b></p>	<p>Once the two teams reached an agreement, contract negotiations with the selected vendor was undertaken.</p>
<p><b>Stage 7 - OAR Document Submitted</b></p>	<p>After a successful vendor was found, L&amp;P again involved the Delivery Lead to <b>prepare</b> an Order Approval Request (OAR) which captured the process undertaken so far. The OAR was <b>endorsed</b> by the AMI Program Director and is attached to a requisition <b>raised</b> by L&amp;P in the Lotus Notes Contracts Register.</p>
<p><b>Stage 8 - Management and EAC Approval Received</b></p>	<p>The Requisition was <b>approved</b> by appropriate delegates and was then presented to the Expenditure Approval Committee (EAC). The committee evaluated and <b>endorsed</b> the requisition which was then filed and a soft copy submitted to the AMI Program team.</p>
<p><b>Stage 9 - Contract Awarded and Executed</b></p>	<p>The contract was awarded to the successful vendor and once the contract was <b>signed</b>, the sourcing process was closed.</p>
<p><b>Stage 10 - Contract Transitioned to Business/Rollout Conducted</b></p>	<p>The vendor and contract then continued under the management of the AMI program to ensure the delivery of contract value and to manage any variations to the contract should they be required.</p>

**Example 1 Contract Summary – AMI WiMAX antennas**

Contract Management Summary	
Details	
Reference Number	
Contract name	Periodic Contract for the Supply of WiMAX External Antennas
Contract description	
RFT reference No.	
Number of replies	
Number of vendors shortlisted	
Winning vendor and Date of Contract Execution	
Contract Value	
Duration	
Recommendation report	

Phase	Activity <i>Procedure required to complete the phase</i>	Person <i>Person who managed the vendor / authorised the activity</i>	Date <i>Start, closure or approval of activity</i>	Documentation <i>Standard Contract Management Process was followed</i>	Description <i>Comments to the activity or reason for deviating from the standard process</i>
<b>Origination of contract</b>	Authority to Proceed	A to P allowance			
<b>Sourcing Strategy</b>	<b>Tender Process</b>	A completed and signed approval to initiate tender exists	Delivery Lead		
		Tender open date	Delivery Lead		
		Tender close date	Delivery Lead		

## AMI Revised Budget Application

Phase	Activity <i>Procedure required to complete the phase</i>	Person <i>Person who managed the vendor / authorised the activity</i>	Date <i>Start, closure or approval of activity</i>	Documentation <i>Standard Contract Management Process was followed</i>	Description <i>Comments to the activity or reason for deviating from the standard process</i>
		A Tender Evaluation Plan (TEP) has been developed for each tender conducted by SP AusNet prior to the tender close date.			
		Tender Approval			
		Post Tender Review has been conducted			
	<b>Quotation</b>	Purchasing Path followed based on the criteria listed			
		Quote Approval			
	<b>POC (Period Order Contract)</b>	Determine if a POC exists? (Note: if a POC exists followed normal process)			
<b>OAR</b>	Order Approval Request				
<b>Requisition</b>	Raising a purchase requisition				
	Requisition approvals (Online approval process by appropriate delegates)				
<b>EAC (Approval)</b>	All supporting documentations are completed and attached to the Requisition, prior to submitting the Requisition for approval				
<b>Contract signatures</b>	Contract signed and closure of sourcing process				
<b>Procurement Contract Execution &amp; Administration</b>	Secure storage of contract and administration by L&P				
<b>Varying Contracts</b>	Variation to contracts				

## 7.4 Example 2: AMI Meter Installation Procurement Process

### 7.4.1 Description of AMI Meter Installation procurement process

*Purpose:* To meet regulatory timelines to install new AMI meters, SP AusNet needed to go to market to select a vendor(s) who could complete both a preliminary site inspection as well as install the AMI meters.

*Text in orange denotes capture points within the Contract Summary*

<p>Stage 1 – Sourcing Strategy Completed</p>	<p>Data and Measurement Solutions (DMS) and the AMI Program identified the need for third party contractors to complete preliminary site inspections and install AMI meters for all SP AusNet households, so initiated a process for the “Supply of Meter Installation services”. Directed by the L&amp;P department and based on the sourcing strategy criteria, the need to undertake a Tender process was determined.</p>
<p>Stage 2 – Tender Request Completed and Signed</p>	<p>To initiate the tender process a Request for Tender was registered in the Lotus Notes Contracts Register. Through automated workflows, Lotus Notes ensures approval was obtained by L&amp;P and by the General Manager delegated authority for the AMI Program. Upon <b>General Manager –approval</b> having been obtained for the request, the Procurement Services Manager issued a unique reference number to trace the procurement process– “RFT 2009/T05”</p>
<p>Stage 3 – Tender Documentation Issued Stage 4 – Tender Closed</p>	<p>A professional service firm was engaged to manage the collation of the requirements and to manage the procurement process. The following documents were prepared:</p> <ul style="list-style-type: none"> <li>• Request For Tender;</li> <li>• Scope/Statement of Work including technical specifications and background;</li> <li>• Draft contract (selected from AS/NZ Standard Contracts);</li> <li>• Bank Guarantee; and</li> <li>• Documents that need to be returned by the vendors e.g schedule, statement of compliance</li> </ul> <p>On the <b>tender open date</b>, L&amp;P released the documents to the vendors and served as the main interface between SP AusNet and the vendors until the <b>tender close date</b>.</p>

*Text in orange denotes capture points within the Contract Summary*

<p><b>Stage 5 – Tender Evaluated</b></p>	<p>Copies of all tender submission received by L&amp;P were distributed to the Technical Evaluation Team. These copies did not have the Schedule of Rates included so that the Technical Evaluation Team provided a view solely on the vendor’s technical compliance and ability. Simultaneously, L&amp;P and one selected SP AusNet evaluation team member who was not part of technical review evaluated commercial and contract deviations. A detailed financial model was developed that standardised the costs to allow for a ‘like to like’ comparison between vendors. The two teams clarified issues arising during this process with the respondents. Adjudication was performed based on weighting matrix of submissions – as defined in the Evaluation Plan. The tender evaluation process was managed by A professional service firm who completed their involvement upon the delivery of the final report. This report included recommendations regarding the next steps to complete contract negotiations.</p>
<p><b>Stage 6 – Contract Negotiated</b></p>	<p>DMS senior leads and the AMI Steering Committee agreed the successful candidates to progress to contract negotiations. Contract negotiations were conducted by DMS representatives in conjunction with L&amp;P.</p>
<p><b>Stage 7 – OAR Document Submitted</b></p>	<p>After a successful vendor was found, L&amp;P again involved the Delivery Lead to <b>prepare</b> an Order Approval Request (OAR) which captured the process undertaken so far. The OAR was <b>endorsed</b> by the AMI Program Director and DMS senior leadership team and was attached to a requisition <b>raised</b> by L&amp;P in the Lotus Notes Contracts Register.</p>
<p><b>Stage 8 – Management and EAC Approval Received</b></p>	<p>The Requisition was <b>approved</b> by appropriate delegates and was then presented to the Expenditure Approval Committee. The committee evaluated and <b>endorsed</b> the requisition which was then filed and a soft copy submitted to the AMI Program team.</p>
<p><b>Stage 9 – Contract Awarded and Executed</b></p>	<p>The contract was awarded to the successful vendor and once the contract was <b>signed</b>, the sourcing process was closed.</p>
<p><b>Stage 10 – Contract Transitioned to Business/Rollout Conducted</b></p>	<p>The vendor and contract then continued under the management of the AMI program to ensure the delivery of contract value and manage any variations to the contract should they be required.</p>

**Example 2 Contract Summary – AMI Meter Installation Services**

**Contract Management Summary**

<b>Contract Management Summary</b>	
<b>Details</b>	
<b>Reference Number</b>	
<b>Contract name</b>	AMI Meter Installation Services Agreement
<b>Contract description</b>	WiMAX Meter Installation Services
<b>RFT reference No.</b>	
<b>Number of replies</b>	
<b>Number of vendors shortlisted</b>	
<b>Winning Vendor and Date of Contract Execution</b>	
<b>Contract Value</b>	
<b>Duration</b>	
<b>Recommendation report</b>	

Phase		Activity <i>Procedure required to complete the phase</i>	Person <i>Person who managed the vendor / authorised the activity</i>	Date <i>Start, closure or approval of activity</i>	Documentation <i>Standard Contract Management Process was followed</i>	Description <i>Comments to the activity or reason for deviating from the standard process</i>
<b>Origination of contract</b>		Authority to Proceed				
<b>Sourcing Strategy</b>	<b>Tender Process</b>	A completed and signed approval to initiate tender exists				
		Tender open date				
		Tender close date				
		A Tender Evaluation Plan (TEP) has been developed for each tender conducted by SP AusNet prior to the tender close date.				
		Tender Approval				
		Post Tender Review has been conducted				
	<b>Quotation</b>	Purchasing Path followed based on the criteria listed				
		Quote Approval				
<b>POC (Period Order Contract)</b>	Determine if a POC exists? (Note: if a POC exists followed normal process)					
<b>OAR</b>	Order Approval Request Details					
<b>Requisition</b>	Raising a purchase requisition					
	Requisition approvals (Online approval process by appropriate delegates)					

## AMI Revised Budget Application

<b>Phase</b>	<b>Activity</b> <i>Procedure required to complete the phase</i>	<b>Person</b> <i>Person who managed the vendor / authorised the activity</i>	<b>Date</b> <i>Start, closure or approval of activity</i>	<b>Documentation</b> <i>Standard Contract Management Process was followed</i>	<b>Description</b> <i>Comments to the activity or reason for deviating from the standard process</i>
<b>EAC (Approval)</b>	All supporting documentations are completed and attached to the Requisition, prior to submitting the Requisition for approval				
<b>Contract signatures</b>	Contract signed and closure of sourcing process				
<b>Procurement Contract Execution &amp; Administration</b>	Secure storage of contract and administration by L&P				
<b>Varying Contracts</b>	Variation to contracts				



## 7.5 AMI Program Index of Contracts

Table 7.2 lists the details of the AMI Program contracts for which contract summaries have been developed.

**Table 7.2: AMI Program Contracts**

No	Contract or Tender Details	Vendor/ Supplier
1	RFP 2008/T49 Provision of XXX Solution Implementation Services	
2	RFQ 2008 AMI Design Services	
3	ITT 2008/T58 AMI Tender Management Services and AMI PMO	
4	RFQ 2009 AMI Customer Information System	
5	EAI System Integration Services	
6	RFQ 2009 AMI Customer Information System Integration Services	
7	RFT 2009/T04 Advanced Metering Infrastructure Production Network*	
8a	RFT 2009/T05 AMI Meter Installation Services*	
8b		
9a	RFI 2009/T15 AMI Metering Solution* (included within the contract is the MMS component A separate software and maintenance support agreement has been entered into )	
9b		
10	RFQ 2009 Mobile Hardware Devices	
11	RFP 2009/T37 Provision of AMI System Integration Services for MMS and Communications Deployment	
12a	RFP 2009/T64 XXX GHz MDS B Band Spectrum License	
12b		
13	ITT 2010/T02 Supply & Delivery of WiMAX External Antennas for the AMI Communications Program*	
14	Purchase of Sun Enterprise Server equipment to support the implementation of the AMI IT Solution through Frontline	
15	POC435226 AMI Communications Network Infrastructure Security System - Supply And Services Agreement*	

---

## AMI Revised Budget Application

---

No	Contract or Tender Details	Vendor/ Supplier
<b>16</b>	AMIITSG XXX Maintenance -1st April 2009 to March 31st 2013	
<b>17</b>	XXX Engagement Professional Services for Release 1 and 1A of the AMI Program	
<b>18</b>	POC426310/D-DMS-00197 Field Mobile Inspection Solution	
<b>19</b>	Supply of 400,000 meter security seals	
<b>20</b>	POC 422629/D-ITA-00036 Hosting File Sharing Service XXX for AMI Program	
<b>21</b>	POC 436595/ D-GCN-00121 IT Consultancy Services Agreement - Services for Solution Architecture support for the SP AusNet AMI Program	
<b>22</b>	POC 435739/ D-DMS-00235 Field Services Agreement -	
<b>23</b>	POC 436169/ D-ITA-00045 Technical Architecture Services for AMI Program	

\* Probity audits had been completed.

## 8 Proposed Budget Variations

During 2009 SP AusNet spent a great deal of time finalising its AMI solution, detailed project planning and undertaking many tenders which ultimately led to the signing of contracts in the last quarter of the year. This impacted the project timing and the forecasts of various components of the program. The result is variations in most of the capital and operating and maintenance categories of the Approved Budget.

The 2010 amounts are based on actual costs incurred (subject to Audit) for the year. These costs are incurred under contract and the variations reflect the result of contract costs differing from budget costs, actual quantities varying from budget quantities, and changed regulatory requirements.

The 2011 forecasts are informed by contracts, timing differentials as a result of actual project outcomes or as a result of quantity variances, and regulatory requirements costs which are forecast to be incurred.

The following sections provide detailed explanations on variances in capital expenditure. SP AusNet is not proposing a revision to the Approved Budget for Operating Expenditure for the AMI initial budget period.

### 8.1 Capital Expenditure

Table 8.1 below summarises the proposed revisions to SP AusNet's Approved Budget for Capital Expenditure for the AMI initial budget period.

**Table 8.1: Capital Expenditure**

(\$'000, Real 2008)

Capital Expenditure	2009	2010	2011	TOTAL
<b>Approved Budget Capital Expenditure</b>	<b>67,901</b>	<b>50,896</b>	<b>102,441</b>	<b>221,238</b>
Variations				
(a) Metering	1,886	10,350	927	13,163
(b) Communications	(5,554)	1,446	728	(3,380)
(c) Information and control services	(27,472)	20,853	8,429	1,810
(d) Non IT	-	640	-	640
<b>Proposed Revised Budget</b>	<b>\$36,761</b>	<b>\$84,185</b>	<b>\$112,525</b>	<b>\$233,471</b>

### 8.1.1 Metering

Metering activities relate to the procurement, installation, salvage, operation and maintenance of the assets comprising the metering installation, including as appropriate measurement transformers, other associated equipment and AMI technology.

Metering costs comprise of meter costs and installation costs. The reasons for the increase in the revised forecast metering costs in 2010 and 2011 as compared to the Approved Budget are explained below.

#### a) Meter costs

The proposed variations to meter costs are detailed in the following table:

**Table 8.2: Meter costs variations**

(\$'000, Real 2008)

Metering	2009	2010	2011	TOTAL
<b>Approved Budget Capital Expenditure</b>	<b>8,828</b>	<b>20,011</b>	<b>56,709</b>	<b>85,548</b>
Variations	1,484	11,969	8,137	21,590
<b>Proposed Revised Budget</b>	<b>\$10,312</b>	<b>\$31,980</b>	<b>\$64,846</b>	<b>\$107,138</b>

The following table shows the meter costs by the respective meter types and also the costs of the necessary components of the meters as per SP AusNet's Approved Budget.

**Table 8.3: Budgeted unit cost per meter variant 1 per the Approved Budget**

(Real \$2008)

Meter types	Budgeted Unit Cost (US\$)	FX Rate	Budgeted Unit Cost (A\$)
Single phase single element		0.6631	
Single phase, two element with contactor		0.6631	
Multiphase		0.6631	
Multiphase, direct connected with contactor		0.6631	
Multiphase Current Transformer connected		0.6631	
<u>Other components</u>			
Communications module		0.6631	

---

## AMI Revised Budget Application

---

In the Approved Budget, SP AusNet had included the cost of antennas required for the meters as part of Communications cost. In the Revised Budget, the cost of antennas is reported as part of meter cost.

Since the Approved Budget, SP AusNet had entered into contracts with two meter suppliers for the supply of the meters

**Table 8.4: Budgeted unit cost per meter variant 1 per the Revised Budget**

(Real \$2010)

Meter types	Revised unit cost (US\$)	FX rate	Revised unit cost (A\$)
Single phase single element		0.8	
Single phase, two element with contactor		0.8	
Multiphase		0.8	
Multiphase, direct connected with contactor		0.8	
Multiphase Current Transformer connected		0.8	
<u>Other components</u>			
Communications module		0.8	
Zigbee card		0.8	
Antenna costs			

**Table 8.5: Budgeted unit cost per meter variant 2 per the Revised Budget**

(Real \$2010)

Meter types	Revised unit cost (US\$) *	FX rate	Revised unit cost (A\$)
Single phase single element		0.8	
Single phase, two element with contactor		0.8	
Multiphase		0.8	
Multiphase, direct connected with contactor		0.8	
Multiphase Current Transformer connected		0.8	
<u>Other components</u>			
Antenna costs			

*\*The cost of the communications module is included in the meter cost.*

---

## AMI Revised Budget Application

---

There has also been a change to the quantity and type of meters to be rolled out as compared to the Approved Budget.

Table 8.6 compares the number of meters to be rolled out in 2010 to the Approved Budget quantities.

**Table 8.6: Quantity of meters in 2010**

Meter types	Year 2010	
	Planned	Actual
<u>Replacement</u>		
Single phase single element	33,586	71,878
Single phase, two element with contactor	17,027	-
Multiphase	7,452	-
Multiphase, direct connected with contactor	5,300	-
Multiphase Current Transformer connected	221	-
	63,586	71,878
<u>New connections</u>		
Single phase single element	7,389	-
Single phase, two element with contactor	3,742	-
Multiphase	2,363	-
Multiphase, direct connected with contactor	259	-
Multiphase Current Transformer connected	32	-
<b>Total</b>	<b>77,371</b>	<b>71,878</b>

---

## AMI Revised Budget Application

---

There has also been a revision to the number of meters to be rolled out in 2011 compared to the Approved Budget quantities and this is shown in Table 8.7 below.

**Table 8.7: Quantity of meters in 2011**

Meter types	Year 2011	
	Planned	Actual
<u>Replacement</u>		
Single phase single element	109,153	132,483
Single phase, two element with contactor	55,336	43,999
Multiphase	24,220	38,188
Multiphase, direct connected with contactor	17,226	3,683
Multiphase Current Transformer connected	718	-
	206,653	218,353
<u>New connections</u>		
Single phase single element	7,551	10,320
Single phase, two element with contactor	3,825	1,704
Multiphase	2,415	1,522
Multiphase, direct connected with contactor	271	35
Multiphase Current Transformer connected	33	56
	14,095	13,637
<b>Total</b>	<b>220,748</b>	<b>231,990</b>



---

## AMI Revised Budget Application

---

Due to variances in the meter costs and the number of meters to be rolled out as explained above, the revised forecast total meter costs for 2010 has increased as shown below.

**Table 8.8: Comparison of 2010 meter costs<sup>12</sup>**

(Real \$2008)

Meter types	Year 2010	
	Budgeted cost \$	Actual cost ^ \$
Single phase single element		
Single phase, two element with contactor		
Multiphase		
Multiphase, direct connected with contactor		
Multiphase Current Transformer connected		
Testing laboratory cost		
Logistics cost		
Disposal cost		
Total costs for AMI meters # *		
Accumulation and interval meters		
<b>Total costs for all meters</b>		

<sup>12</sup> Please note all commercial-in-confidence information has been left blank intentionally.

## AMI Revised Budget Application

For 2011, the revised forecast costs are also expected to be higher as compared to the Approved Budget due to similar reasons and Table 8.9 shows this comparison. All new connections in 2011 are expected to be installed with AMI meters, in line with the assumption made in the Approved Budget.

**Table 8.9: Comparison of 2011 meter costs<sup>13</sup>**

(Real \$2008)

Meter types	Year 2011	
	Budgeted cost \$	Revised cost \$
Single phase single element		
Single phase, two element with contactor		
Multiphase		
Multiphase, direct connected with contactor		
Multiphase Current Transformer connected		
Logistics costs		
Disposal costs		
Less: Volume discount *		
<b>Total costs for AMI meters</b>		

\* SP AusNet is entitled to receive a volume discount on meter variants

<sup>13</sup> Please note all commercial-in-confidence information has been left blank intentionally.

**b) Meter installation costs**

The proposed variations to meter installation costs are detailed in the following table:

**Table 8.10: Meter installation costs variations**

(\$'000, Real 2008)

Meter installation costs	2009	2010	2011	TOTAL
<b>Approved Budget Capital Expenditure</b>		<b>8,421</b>	<b>27,368</b>	<b>35,789</b>
Variations	402	(1,619)	(7,210)	(8,427)
<b>Proposed Revised Budget</b>	<b>\$402</b>	<b>\$6,802</b>	<b>\$20,158</b>	<b>\$27,362</b>

SP AusNet had entered into contracts with two meter installation service providers subsequent to the approval of the Approved Budget. The installation costs per meter based on these two contracts are less than the Approved Budget and are shown in the following table:

**Table 8.11: Installation cost per meter**

Meter types	Budgeted cost / meter (\$2008)	Revised cost / meter (\$2010)
Single phase single element		
Single phase, two element with contactor		
Multiphase		
Multiphase, direct connected with contactor		
Multiphase Current Transformer connected		

---

## AMI Revised Budget Application

---

Based on different contracted installation cost per meter and the variance in the total number of meters to be rolled out, it is expected that the revised forecast total meter installation costs for 2010 would be different than the Approved Budget as shown below:

**Table 8.12: Comparison of 2010 meter installation costs**

(Real \$2008)

Meter types	Year 2010	
	Budgeted cost	Revised cost
Single phase single element		
Single phase, two element with contactor		
Multiphase		
Multiphase, direct connected with contactor		
Multiphase Current Transformer connected		
<b>Total</b>		

*Note: The above numbers may not agree to the AMI Revised Budget template due to rounding.*

Similarly in 2011, the different installation cost per meter results in a different revised forecast total meter installation costs as compared to the Approved Budget as shown in the following table:

**Table 8.13: Comparison of 2011 meter installation costs**

(Real \$2008)

Meter types	Year 2011	
	Budgeted cost	Revised cost
Single phase single element		
Single phase, two element with contactor		
Multiphase		
Multiphase, direct connected with contactor		
Multiphase Current Transformer connected		
<b>Total</b>		

*Note: The above numbers may not agree to the AMI Revised Budget template due to rounding.*

### 8.1.2 Communications

The implementation of AMI services requires the development, implementation, management and ongoing operation and support of a communication facility between individual customer installations and the utility's network infrastructure and information and control systems. Key areas of the communications approach include the underlying coverage and capacity parameters and communications infrastructure.

The proposed variations to communications costs are detailed in the following table:

**Table 8.14: Communications costs variations**

(\$'000, Real 2008)

Communications costs	2009	2010	2011	TOTAL
<b>Approved Budget Capital Expenditure</b>	<b>6,400</b>	<b>6,792</b>	<b>15,073</b>	<b>28,265</b>
Variations	(5,554)	1,446	728	(3,380)
<b>Proposed Revised Budget</b>	<b>\$846</b>	<b>\$8,238</b>	<b>\$15,801</b>	<b>\$24,885</b>

As mentioned in SP AusNet's Charges Revision Application,<sup>14</sup> SP AusNet had budgeted to commence the installation of the WiMAX infrastructure in 2009, but due to some timing issues, the majority of this expense will only be incurred in 2010.

The following table compares the number of WiMAX base stations that SP AusNet intends to install from 2009 to 2011 against the assumptions previously made in the Approved Budget.

**Table 8.15: Comparison of WiMAX base stations**

No. of Towers	2009		2010		2011		TOTAL	
	Planned	Actual	Planned	Actual	Planned	Planned	Planned	Actual / Planned
WiMAX base stations	6	-	11	11	33	26*	50	37

\* Detailed plans for 9 base stations by June 2011

SP AusNet had not entered into contracts for its communications infrastructure at the time of preparing the Approved Budget and costs were based on quotes from potential vendors. These quotes assumed a high level plan for the communications infrastructure whereby similar types of base stations were assumed to cost the same.

Based on an analysis on the actual amount incurred on five base stations installed on high voltage (HV) or radio towers, it was noted that all five base stations' costs were different. The only similarity between the costs to install the five base stations was material cost. Planning and labour costs have been found to vary the most and comprise the bulk of the cost of the WiMAX

---

<sup>14</sup> SPA, '2011 Charges Revision Application' 31 August 2010

infrastructure. Costing for base stations is now performed in phases which are more detailed as compared to the high level planning performed for the Approved Budget.

### 8.1.3 Information and Control Services

Information and control services comprise the NMS and Business System requirements where:

- the NMS provides an interface between different environments which constitute the overall information system, and
- the business systems deliver the required functionality and service level performance and to meet ongoing business needs.

The proposed variations to information and control services costs are detailed in the following table:

**Table 8.16: Information and control services costs variations**

(\$'000, Real 2008)

Information and control services costs	2009	2010	2011	TOTAL
<b>Approved Budget Capital Expenditure</b>	<b>52,673</b>	<b>15,672</b>	<b>3,291</b>	<b>71,636</b>
Variations	(27,472)	20,853	8,429	1,810
<b>Proposed Revised Budget</b>	<b>\$25,201</b>	<b>\$36,525</b>	<b>\$11,720</b>	<b>\$73,446</b>

As mentioned in SP AusNet's Charges Revision Application, SP AusNet's budgeted IT capital expenditure in the Approved Budget was primarily based on delivering the final IT solution in two stages. Stage one was to be implemented in November 2009 and stage two was to be implemented in April 2010. The resolution of SP AusNet's final IT solution and hence, signing of contracts affected the interface with the preferred suppliers for some of the IT components and subsequently caused a shift in the program's IT timeline with the major portion of SP AusNet's IT infrastructure now expected to be deployed by the end of 2010. The value of the final signed contracts which were slightly higher than the value assumed in the Approved Budget also contributed to the overall increase in the IT capital expenditure as depicted in the Revised Budget.

### AMI IT Services Provider

SP AusNet obtains the majority of its IT Services under a contract with Enterprise Business Services (Australia) Pty Ltd (EB Services). Experienced IT resources are engaged by EB Services to provide SP AusNet's IT services to agreed Service Level standards for IT services. These IT services include:

- End-User Computing – providing IT Services for Desktop, Voice and the IT Service Desk;
- Application Services – providing IT Services for Application Support and Application Enhancements;
- Managed Services – providing IT Services for Data Centres, Servers, Storage and Networks; and

- Project and Advisory Services – provide IT Services for Feasibility Studies, Business Case Development, Advisory Services and Project Delivery.

The SP AusNet Stapled Group has retained the crucial IT services of IT Strategy and Architecture, IT Services Management and IT Service Level Contract Management. SP AusNet has provided the AER with complete details of its contractual relationship with EB Services.<sup>15</sup>

The allocation is consistent with the methodology provided to the AER for the 2011-2015 EDPR division.

### **8.1.4 Non IT Capital Expenditure**

Late in 2010 SP AusNet in-sourced the meter data management service provider functions and as a result, had to establish premises to accommodate the personnel performing these functions. A lease was signed on a greenfield building in Berwick and resources were required to fitout the premises. SP AusNet will amortise this fitout cost over 7 years.

---

<sup>15</sup> SPA 'EDPR Related Party Arrangements', November 2009

## 9 Proposed Revised Budget Summary

The following tables summarise the proposed revisions to SP AusNet's Approved Budget for Capital Expenditure for the AMI initial budget period.

**Table 9.1: Approved Budget Capital Expenditure**

(\$'000, Real 2008)

Approved Budget Capital Expenditure	2009	2010	2011	TOTAL
Metering	8,828	28,432	84,077	121,337
Communications	6,400	6,792	15,073	28,265
Information and control services	52,673	15,672	3,291	71,636
<b>Total Approved Budget</b>	<b>\$67,901</b>	<b>\$50,896</b>	<b>\$102,441</b>	<b>\$221,238</b>

**Table 9.2: Proposed Revised Budget Capital Expenditure**

(\$'000, Real 2008)

Proposed Revised Budget Capital Expenditure	2009	2010	2011	TOTAL
Metering	10,714	38,782	85,004	134,500
Communications	846	8,238	15,801	24,885
Information and control services	25,201	36,525	11,720	73,446
Non IT	-	640	-	640
<b>Total Approved Budget</b>	<b>\$36,761</b>	<b>\$84,185</b>	<b>\$112,525</b>	<b>\$233,471</b>

**Table 9.3: Variation to Approved Budget Capital Expenditure**

(\$'000, Real 2008)

Variation to Approved Budget Capital Expenditure	2009	2010	2011	TOTAL
Metering	1,886	10,350	927	13,163
Communications	(5,554)	1,446	728	(3,380)
Information and control services	(27,472)	20,853	8,429	1,810
Non IT	-	640	-	640
<b>Total Approved Budget</b>	<b>\$ (31,140)</b>	<b>\$ 33,289</b>	<b>\$ 10,084</b>	<b>\$ 12,233</b>



# **APPENDIX A**

## **PROCUREMENT, SOURCING, VENDOR AND CONTRACT MANAGEMENT POLICIES AND PROCEDURES**

### List of Documents

- PTP00-079 Tender Cycle Time
- PTP00-107 Tender Opening
- PTP00-108 Submitting an OAR to the EAC
- PTP00-109 Submitting a Waiver of Competition
- PTP00-110 Managing Foreign Currency in Orders and Contracts
- PTP00-111 Tender Evaluation Plan
- PTP00-112 Tender Closeout and Review
- PTP00-113 Tender Documentation and Storage
- PTP00-114 Tender Support and Contracting Procedure
- PTP00-119 EAC Procedure
- PTP00-121 Procurement Policy
- PTP00-122 Procurement Manual
- PTP00-124 Quotation
- PTP00-125 Procurement Contract Execution and Administration
- PTP00-134 Tender Initiation Request - user Guide
- PTP00-135 LNCR Reader View
- PTP00-136 Contract Register Proforma
- PTP00-146 Supplier Details Management Policy
- Sourcing Strategy Document

# **APPENDIX B**

## **AMI CONTRACT SUMMARIES**

**List of Contract Summaries**

<b>No</b>	<b>Contract or Tender Details</b>	<b>Vendor/ Supplier</b>
1	RFP 2008/T49 Provision of XXX Solution Implementation Services	
2	RFQ 2008 AMI Design Services	
3	ITT 2008/T58 AMI Tender Management Services and AMI PMO	
4	RFQ 2009 AMI Customer Information System	
5	EAI System Integration Services	
6	RFQ 2009 AMI Customer Information System Integration Services	
7	RFT 2009/T04 Advanced Metering Infrastructure Production Network*	
8a	RFT 2009/T05 AMI Meter Installation Services*	
8b		
9a	RFI 2009/T15 AMI Metering Solution*(included within the contract is the MMS component A separate software and maintenance support agreement has been entered into )	
9b		
10	RFQ 2009 Mobile Hardware Devices	
11	RFP 2009/T37 Provision of AMI System Integration Services for MMS and Communications Deployment	
12a	RFP 2009/T64 XXX GHz MDS B Band Spectrum License	
12b		
13	ITT 2010/T02 Supply & Delivery of WiMAX External Antennas for the AMI Communications Program*	
14	Purchase of XXX Enterprise Server equipment to support the implementation of the AMI IT Solution through Frontline	
15	POC435226 AMI Communications Network Infrastructure Security System - Supply And Services Agreement*	
16	AMIITSG XXX Maintenance -1st April 2009 to March 31st 2013	
17	XXX Engagement Professional Services for Release 1 and 1A of the AMI Program	
18	POC426310/D-DMS-00197 Field Mobile Inspection Solution	

---

## AMI Revised Budget Application

---

No	Contract or Tender Details	Vendor/ Supplier
<b>19</b>	Supply of 400,000 meter security seals	
<b>20</b>	POC 422629/D-ITA-00036 Hosting File Sharing Service XXX for AMI Program	
<b>21</b>	POC 436595/ D-GCN-00121 IT Consultancy Services Agreement - Services for Solution Architecture support for the SP AusNet AMI Program	
<b>22</b>	POC 435739/ D-DMS-00235 Field Services Agreement -	
<b>23</b>	POC 436169/ D-ITA-00045 Technical Architecture Services for AMI Program	

\* Probity audits had been completed and are attached.

# **APPENDIX C**

## **AMI CONTRACTS**

**List of Contracts**

<b>No</b>	<b>Contract Details</b>	<b>Vendor/ Supplier</b>
1	RFP 2008/T49 Provision of XXX Solution Implementation Services	
2	RFQ 2008 AMI Design Services	
3	ITT 2008/T58 AMI Tender Management Services and AMI PMO	
4	RFQ 2009 AMI Customer Information System	
5	EAI System Integration Services	
6	RFQ 2009 AMI Customer Information System Integration Services	
7	RFT 2009/T04 Advanced Metering Infrastructure Production Network	
8a	RFT 2009/T05 AMI Meter Installation Services	
8b		
9a	RFI 2009/T15 AMI Metering Solution (included within the contract is the MMS component A separate software and maintenance support agreement has been entered into )	
9b		
10	RFQ 2009 Mobile Hardware Devices	
11	RFP 2009/T37 Provision of AMI System Integration Services for MMS and Communications Deployment	
12a	RFP 2009/T64 XXX GHz MDS B Band Spectrum License	
12b		
13	ITT 2010/T02 Supply & Delivery of WiMAX External Antennas for the AMI Communications Program	
14	Purchase of XXX Enterprise Server equipment to support the implementation of the AMI IT Solution through Frontline	
15	POC435226 AMI Communications Network Infrastructure Security System - Supply And Services Agreement	
16	AMIITSG XXX Maintenance -1st April 2009 to March 31st 2013	
17	XXX Engagement Professional Services for Release 1 and 1A of the AMI Program	
18	POC426310/D-DMS-00197 Field Mobile Inspection Solution	

---

## AMI Revised Budget Application

---

No	Contract Details	Vendor/ Supplier
<b>19</b>	Supply of 400,000 meter security seals	
<b>20</b>	POC 422629/D-ITA-00036 Hosting File Sharing Service XXX for AMI Program	
<b>21</b>	POC 436595/ D-GCN-00121 IT Consultancy Services Agreement - Services for Solution Architecture support for the SP AusNet AMI Program	
<b>22</b>	POC 435739/ D-DMS-00235 Field Services Agreement - Field work of retrofitting Communications Modules	
<b>23</b>	POC 436169/ D-ITA-00045 Technical Architecture Services for AMI Program	