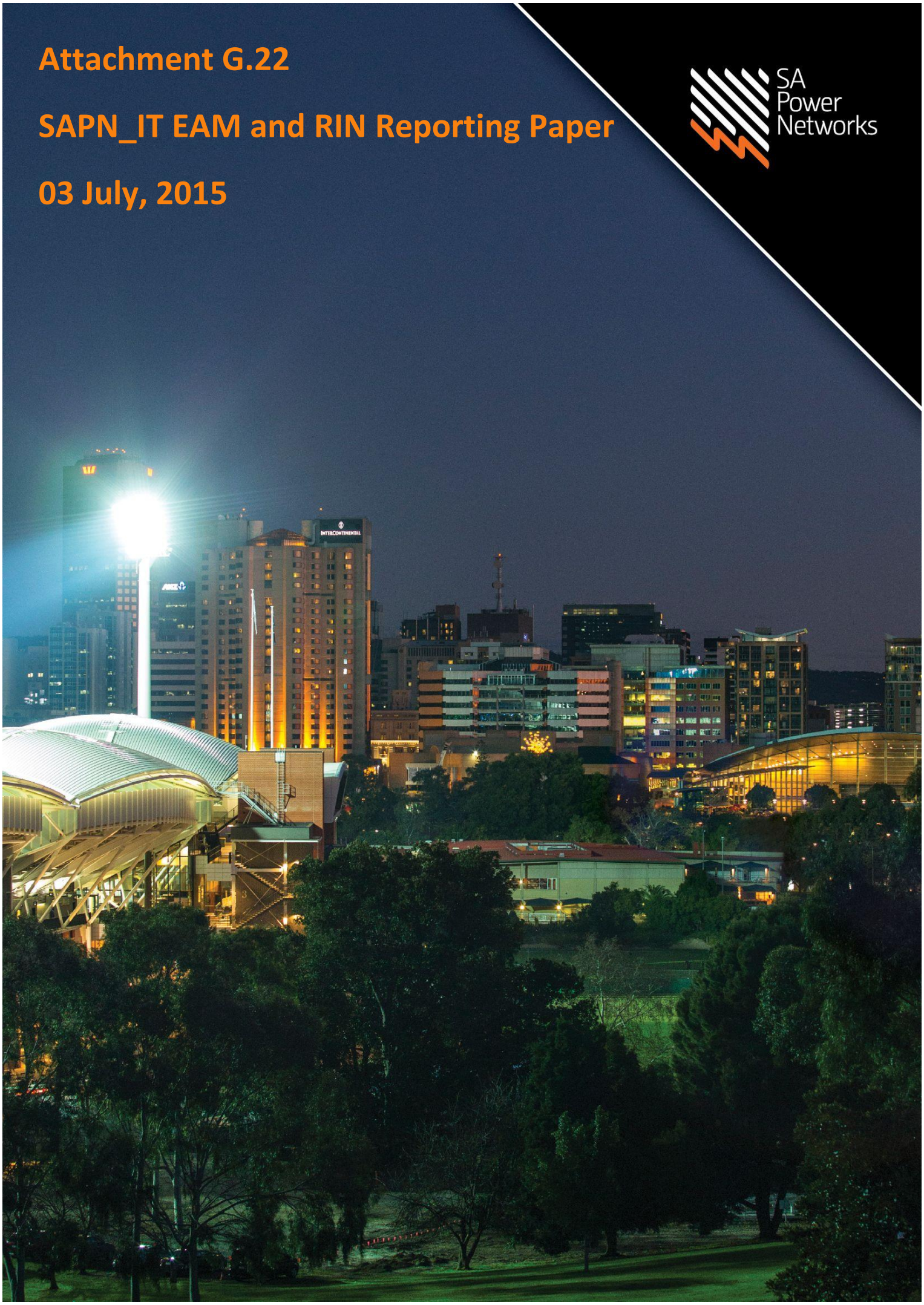


Attachment G.22

SAPN_IT EAM and RIN Reporting Paper

03 July, 2015



1. EAM and RIN Reporting

The AER's Better Regulation program has imposed new regulatory information notice (**RIN**) requirements on DNSPs.

Effective from 2013/14, SA Power Networks will be required to complete Economic Benchmarking (**EB**) and Category Analysis (**CA**) RINs annually, in addition to the Annual RIN and the Reset RIN it is required to complete every five years.

The purpose of this document is to explain in detail Enterprise Asset Management and how it will contribute to delivering actual data required to complete the annual RINs. It also includes the analysis of operating costs which would be incurred if the capital funding for the projects required to deliver RIN compliance is disallowed.

Much of SA Power Networks' asset data has been categorised and maintained based on original systems implementation (such as SAP in 1997) and has organically evolved based on business and customer requirements. To fundamentally change the data structures throughout the organisation is not a simple task and will involve changes to many core systems and business processes.

SA Power Networks has had a very low historical IT spend and many original systems and processes have been maintained with minimal significant capability increase. Therefore when a new level and categorisation of data was required by the AER in the form of RINs, the impact has been significant to SA Power Networks.

To deliver the majority of the capability and processes that will support delivery on these new requirements, the Enterprise Asset Management initiative must be implemented. It provides the 'backbone' data mapping system cross the organisation to manage asset data, delivering 46% of the 'actual' data points required by the RINs that we are currently unable to provide.

2. Implementing EAM

SA Power Networks is faced with significant changes in our environment which can be described as a combination of the following:

- external changes on the organisation (new RIN requirements and changing customer expectations on service) which drive the need for better asset management systems, better asset information and better reporting in order to comply with our regulatory obligations; and
- internal issues (old systems, non-integrated disparate systems, many manual processes and Excel spread-sheets, low RIN compliance, all exacerbated by corporate knowledge about to be lost with ageing workforce) which drive the need for better asset management systems, better asset information and better reporting in order to maintain our current service levels in relation to the provision of SCS.

Additionally, SA Power Networks is always looking for ways to get the most from its infrastructure which is the core of the business, whilst meeting customer expectations for safe, affordable electricity distribution. The requirement for a customer centric focus, efficient end-to-end operations and of course cost management of the business has never been greater.

To achieve this, good asset management practices are essential as the cost of installing, maintaining, operating and decommissioning the physical infrastructure assets forms the most significant portion of the business expenditure.

In addition, the EB RIN and CA RINs contain information reporting requirements of a financial and non-financial nature in categories that are new to SA Power Networks and to a large degree are not captured efficiently by current processes and systems.

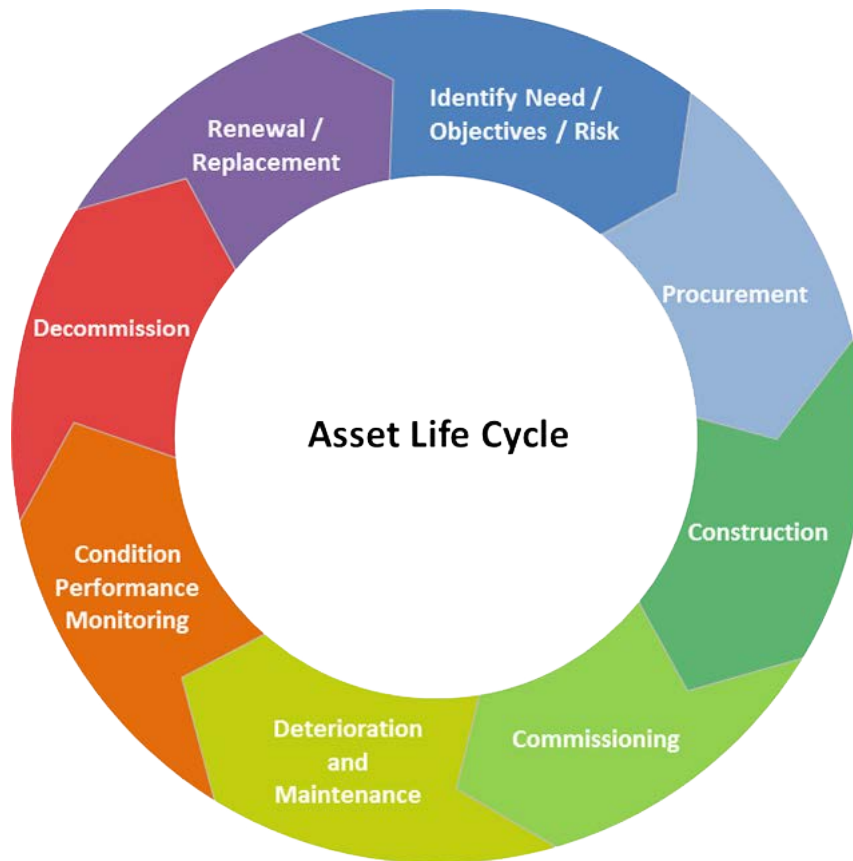
The RINs require detailed information from all areas of the business at a level of detail that is not currently collected. The time and effort to collate the information to complete each RIN, particularly information related to the end-to-end lifecycle of the infrastructure assets, relies heavily upon the knowledge and manual effort of individuals, resulting in increased cost to the business and lower overall assurance of the quality of data. This situation is not sustainable.

2.1 Asset Life Cycle

To ensure effective asset investment decisions are made, enabling sustainable business performance results, SA Power Networks must take a holistic approach to network asset management that not only considers the infrastructure assets but includes the supporting business processes, resources, data and enabling technologies.

When a holistic approach is taken to whole of life asset management, vast amounts of asset data can be efficiently collected and managed.

The following figure gives an overview of the asset life cycle. Asset data must be collected along the life cycle to ensure the applicable information is available to enable good asset management and the reporting requirements of the RINs.



Source: Design Systems Inc.

The asset life cycle outlined above is fairly simple if one considers a single asset. However, when one considers a mature infrastructure network with hundreds of thousands of individual assets the task of managing the assets across the entire life cycle becomes extremely complicated.

It is critical that SA Power Networks understands where its assets are located in the network, where they are in their life cycle, what their condition is and therefore what can be done about their future cost and performance.

As an example, consider the potential data collection points along the life cycle of an asset:

- Identify Need / Objectives Risk
 - This implies a level of data analytics which calls for that the information required being easily accessible within a corporate integrated application environment. This is currently not the case at SA Power Networks, and the information must be obtained from disparate applications.
- Procurement
 - Prior to procurement, one would expect the Asset Standards and Design functions would have obtained and registered asset attributes, location data, connectivity and description data. This is not the case at SA Power Networks, as the process and applications are not integrated – there are at least 4 applications (standards, design, GIS and SAP) involved prior to the point of procurement.

- On procurement the asset description, attribute and location data should be updated. Again the process at SA Power Networks does not cater to this and procurement is treated as a stand-alone process that is not integrated with the asset management process.
- Construction
 - At this stage the asset description, attribute, location and connectivity data should again be updated. Again, the process at SA Power Networks does not cater for this.
- Commissioning
 - Again at this stage the asset description, attribute, location and connectivity data should be updated. The process at SA Power Networks is to complete manual forms and send them to relevant organisational areas for manual data entry. The sheer volume of this data means that there is a significant lag in the data entry.
- Deterioration and Maintenance
 - The operations and maintenance processes of the business need to update asset information such as description, attributes, location, connectivity, tags, condition and maintenance history information. At SA Power Networks this data is held in disparate unintegrated systems across the landscape including manual/physical records, and is therefore not readily accessible.
- Condition Performance Monitoring
 - This process updates information such as description, attributes, location, connectivity, and condition monitoring measurement points. Again this data at SA Power Networks is held in disparate unintegrated systems across the organisational landscape including manual/physical records, and is therefore not readily accessible.

- Decommission
 - This process should update description, connectivity and status information. SA Power Networks has largely manual processes that support the decommissioning function and relies upon manual forms to be sent from the field to centralised departments for update.
- Renewal / Replacement
 - These processes should again update information such as description, attributes, location, connectivity, tags, condition, maintenance history and disposals. SA Power Networks again has largely manual processes that support these processes and rely upon manual forms to be sent from the field to centralised departments for update.

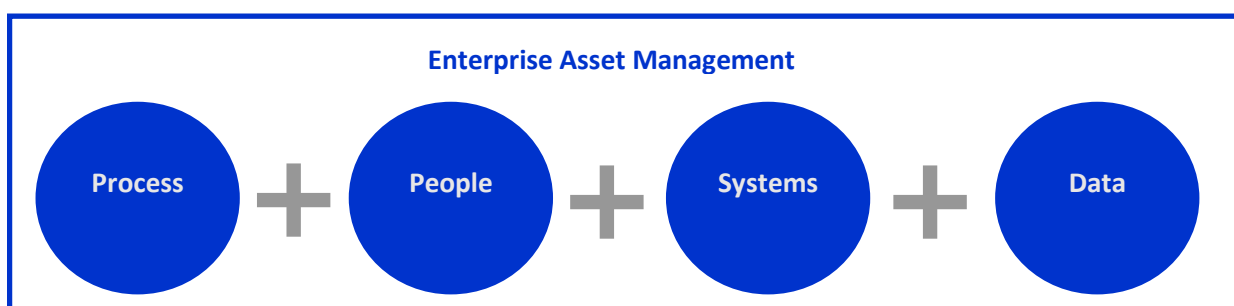
In addition to the core processes outlined in the figure above efficient support processes are essential, such as:

- Strategic Planning
- Demand Management
- Program / Project Management
- Asset Operations
- Work and Resource Management
- Supply Chain Management
- Financial Management

It is this environment of core and support processes necessary to manage the entire asset life cycle of an organisation's assets that has now been termed Enterprise Asset Management (**EAM**).

2.2 Enterprise Asset Management

EAM has been defined as the whole of life optimal management of the physical assets of an organisation to maximise value. EAM is the business processes and the people, data and systems required to manage an organisation's assets throughout their life cycle as outlined in the previous section.



Current State

The current state of EAM and management of the entire asset life cycle at SA Power Networks can be classed as low in maturity.

The case for change is characterised by the following external and internal challenges:

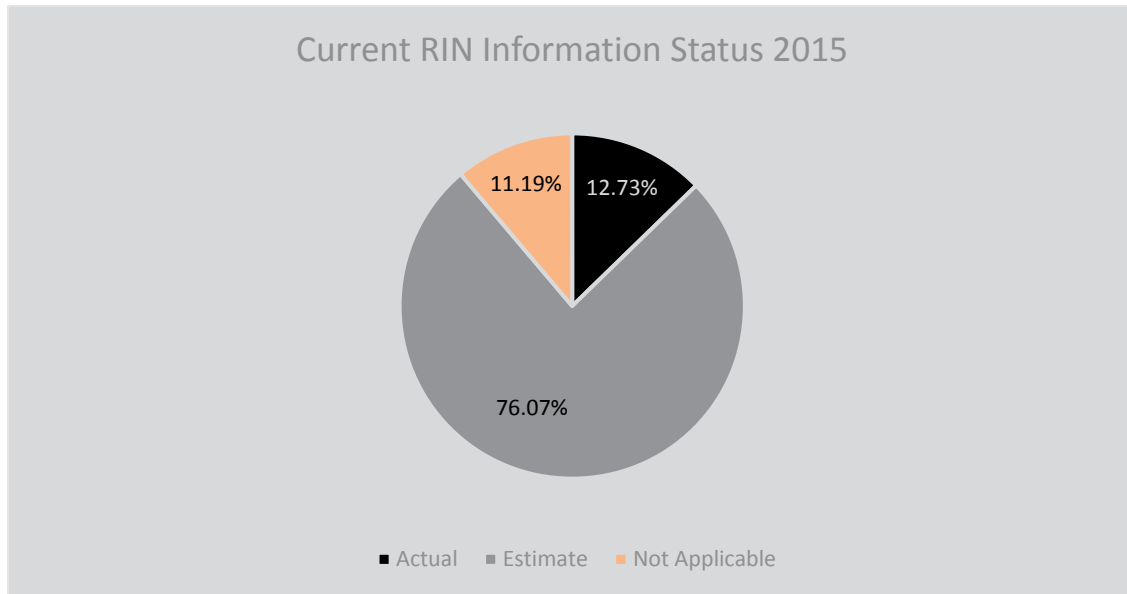
- External Challenges
 - Downward pressure on network pricing.
 - Overall energy demand in South Australia is expected to remain flat over the next 5 years, albeit with localised areas of both increase and decrease.
 - As energy demand growth moderates there is likely to be opportunity to defer augmentation.
 - Increasing compliance requirements including environmental, regulatory and statutory increasing the cost base of the business.
 - The uptake in distributed generation (PV systems) and anticipated growth in embedded generation sources is causing a significant change in the network flows and therefore places pressure on the network infrastructure assets service levels and increased cost pressures.
 - Customer expectations are growing in terms of expecting a consistent and reliable supply, and up to date data and transparency during supply disruptions, without any additional cost.
- Internal Challenges
 - The aging infrastructure assets require an increase in analytics to ensure SA Power Networks can maintain the reliability of supply at the lowest possible cost. At this time the data required to support the analytical capability is not collected consistently for key assets and is stored in disparate systems.
 - The management of the asset base through its life cycle requires the collection of a huge amount of disparate data across the enterprise. The nature of this data supports the strategic, tactical and operational activities of the organisation.
 - Data is collected, often manually, and entered into disparate system such as the SAP ERP, GIS, Customer Information System (**CIS OV**), OMS, ADMS, Excel and other databases. There is no integrated technology solution available at SA Power Networks.
 - The aging workforce retiring and taking with them many years of corporate knowledge and expertise that must be efficiently passed on to the next generation. In many cases the knowledge required to determine asset management strategies and complete the information requirements of the RINs rests with an employee and disparate databases. In other words the knowledge cannot be classed as corporate knowledge due to its inaccessibility.
 - SA Power Networks has an improving level of maturity with respect to Enterprise Architecture, Business Architecture, Process and Information Management with further steps being taken to progress in these areas.
 - The processes and systems currently in place are dis-jointed with large amounts of data not being integrated, making it difficult to provide a single source of the truth and resulting in manual data transfers limit analytical capability.
 - The technologies in use do not allow SA Power Networks to efficiently and effectively meet the increasing customer expectations regarding customer-facing initiatives and the greater demand for real-time communication and interaction.

Based on the current environment it is difficult to enable reporting of actual data for the RINs. The data collected for the CA and EB reports submitted to the AER in 2014 contained 76% estimated data.

To enable reporting of actuals the data needs to be defined at a detailed level (compared to current practice) and by different asset type, as required in the RIN categories. SA Power Networks' data is not recorded in the same categories and therefore requires judgments and assumptions to report at the levels required.

Where such judgements are made, the auditors determine that the information must be classified as estimated and negative assurance is provided. Positive assurance provides significantly more scrutiny such as business process reviews, control testing and such audit techniques as sampling, verifying, observations and substantive analysis.

The following chart identifies that the bulk of the information requirements to complete the EB and CA RINs was based upon best estimates.



The EB and CA RINs require the collection of financial and non-financial information across the business and in particular throughout the asset life cycle.

It has been established that the processes and technologies employed at SA Power Networks to support the EAM processes do not efficiently and effectively allow the business to meet the complex and detailed requirements of either the RINs or those required to manage the assets from a life cycle point of view.

The Original Proposal included a number of projects that have been identified as necessary for SA Power Networks to efficiently meet the increasing demands on the business from all stakeholders.

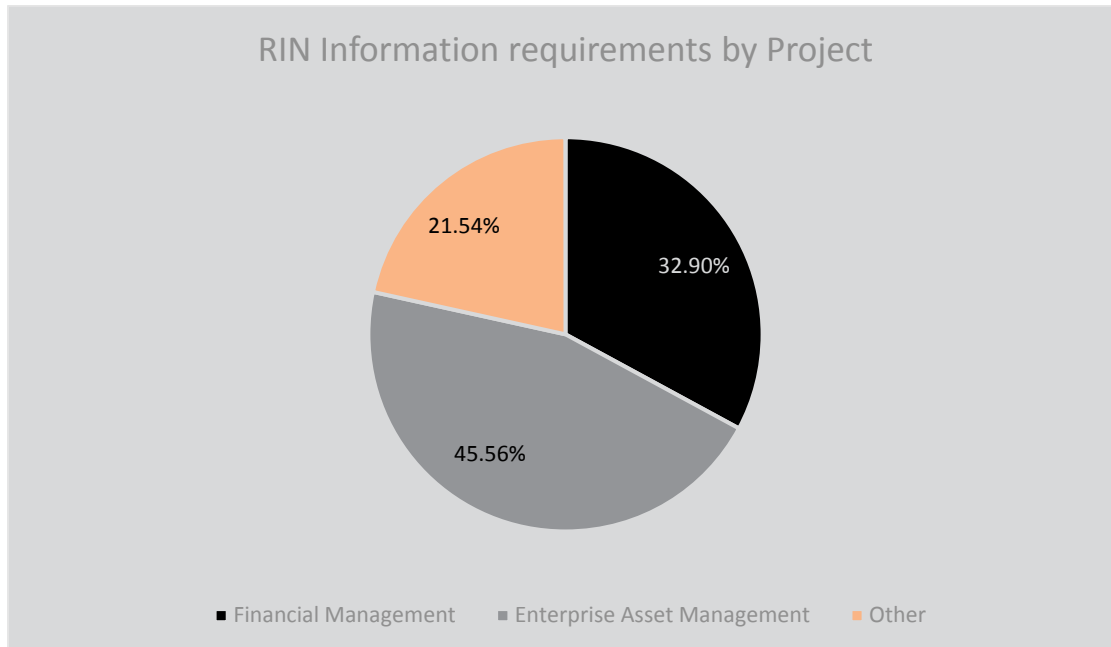
The following graph identifies the percentage of information requirements included in the EB and CA RINs that may be addressed with a step change in the processes and technologies related to Financial Management, Enterprise Asset Management (and dependent projects), RIN Reporting and other data sources (including current actuals and additional actuals obtained from vendors).

In order to verify the projects would deliver the required actual data points for the RINs, a comprehensive analysis of the 1611 fields in EB and CA RINs was undertaken and mapped to the capabilities being delivered by the identified projects. These projects are

- EAM;
- Financial Management;
- RIN Reporting; and
- Other dependent projects

In the Revised Proposal, all but one of the dependent projects (Field Force Mobility, HR Systems, BI Enablement, Enterprise Information Management and Intelligent Design Management System) have

had scope reduced in the 2015-20 RCP to only deliver the capability required for RINs. The remaining scope has been pushed in to the subsequent 2020-25 RCP, therefore reducing the 2015-20 RCP non-recurrent IT costs. Field Force Mobility has retained its full scope as it will deliver organisational strategic objectives. Further detail on the scope required by the dependent projects to deliver on our regulatory obligations is found in Appendix B of this document.



The graph above identifies the percentage of data requirements by project (Financial Management, Enterprise Asset Management and Other - being dependent projects) that must be addressed to ensure SA Power Networks to meets all requirements, in terms of:

- Completeness of information;
- Accuracy of information;
- Granularity of data;
- Compliance with the AER’s RIN obligations; and
- Automated reporting capabilities.

Benefits of Enterprise Asset Management

The benefits associated with taking an EAM approach to the business processes and supporting applications are compelling, varied and include the following:

- A robust and integrated EAM environment would enable SA Power Networks to take a proactive approach to maintaining the infrastructure asset through the increased and more efficient and effective data analytics capability. This capability improvement enables the following benefits:
 - True asset life cycle planning ensures assets are repaired, refurbished or replaced according to network risk and their value is maximised.
 - An increased ability to plan and predict future expenditure.
- The EAM integrated process and application landscape boosts the efficiency of the work order life cycle:

- There is no need for the paper trails and job folders as per the current state. No time is needed collating this data including drawings in the Depot prior to being dispatched to the job. The information is electronically attached to the job and can be accessed remotely.
- Field crews can respond faster to work requests, through the use of geospatially integrated applications.
- The ability to assign work orders to an asset and the geospatially integrated processes increases the ability to bundle work, reducing the level of re-work , travel times and data duplication.
- The improved EAM processes increase the ability to manage the program of work and more effectively manage, plan and schedule the required resources:
 - Greater certainty of the short, medium and long term work and resource schedules, improves the ability to manage the supply chain resulting in less waste and re-work.
- The integrated EAM environment improves customer outcomes through:
 - The ability to assign work to an asset and geospatially represent the asset and associated work with a customer, providing call centre operators with information at their figure tips that would take days to compile in the current environment.
 - The ability to improve customer communications using up-to-date technologies and real-time data contained within the corporate database rather than across disparate unintegrated applications.
- The data compiled and updated during the life cycle of an asset increases the RIN Compliance capability of SA Power Networks and removes the difficult, complex and onerous manual effort required to gather that information today.

In order to clearly demonstrate the impact of collecting actual asset data at the level required, we have included in this document, the process for replacement of a power line asset, as an example. There is just one work process common between the revised and current process as routinely undertaken by SA Power Networks today. We have detailed the process by current state; with manual collection and existing systems to show the effort required by SA Power Networks to be RIN compliant (this includes the opex expenditure required to collect data manually should our required IT capital expenditure be disallowed).

3. Data collection example – Power line asset replacement

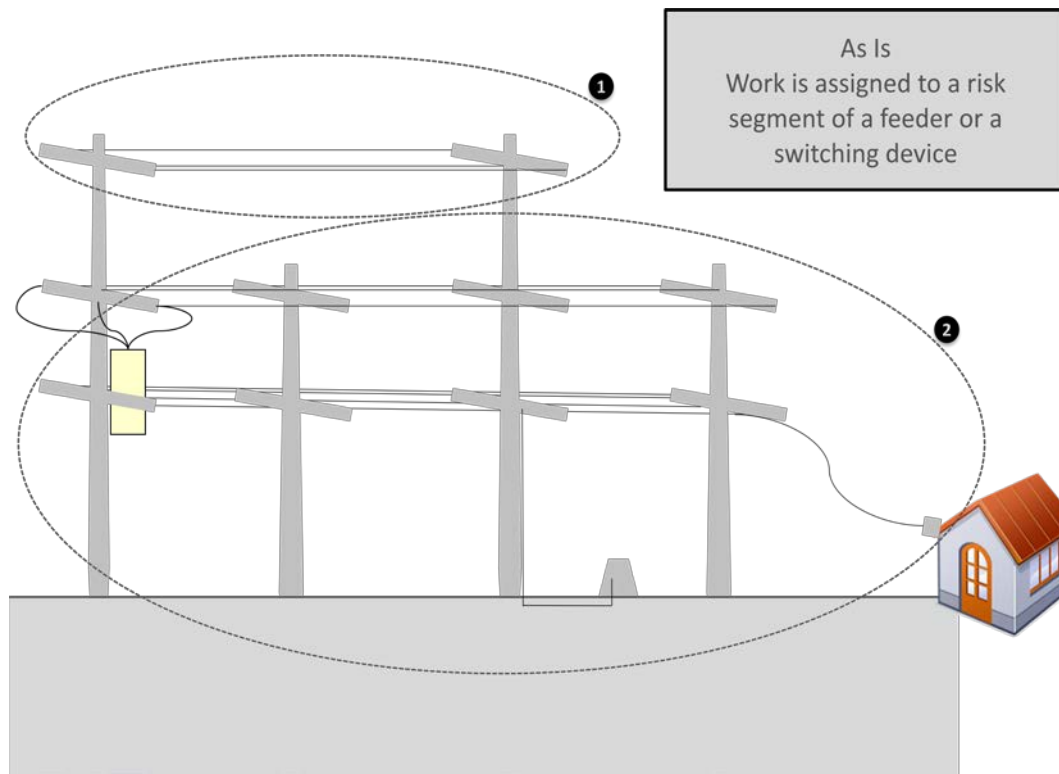
3.1 Current process

The current process for asset replacements includes work prioritisation, bundling of jobs, scheduling, cost reconciliation, job closure, and work being allocated to a switching device or a “feeder” segment.

On completion, the job costs are assigned to a switch asset or to a “feeder” asset (see #1 and #2 in the figure below) although this information provides no physical attributes, as it is a functional or operational concept.

The approach creates the following situation;

- asset data management issues are the responsibility of individual teams;
- the subsequent outcomes of which have varying degrees of data inaccuracy; and
- lack of timeliness in data delivery and data unavailability.



For example, for replacement of a Stobie pole, the current high level process from inspection through to RIN reporting is as follows:

Inspection – the Inspection Planning is done at feeder level, based on cycle, by location within the network and, in particular, the corrosion zone the feeder lies within. The inspection work orders are raised for a feeder segment and issued to Asset Inspectors for completion. The Asset Inspector undertakes pole inspections on the feeder segment covered by the work order. Should a defect(s) be identified, they are assessed and prioritised in accordance with SA Power Networks’ Line Inspection Manual, with a notification raised in our SAP business management system against the feeder, including the pole GPS coordinates.

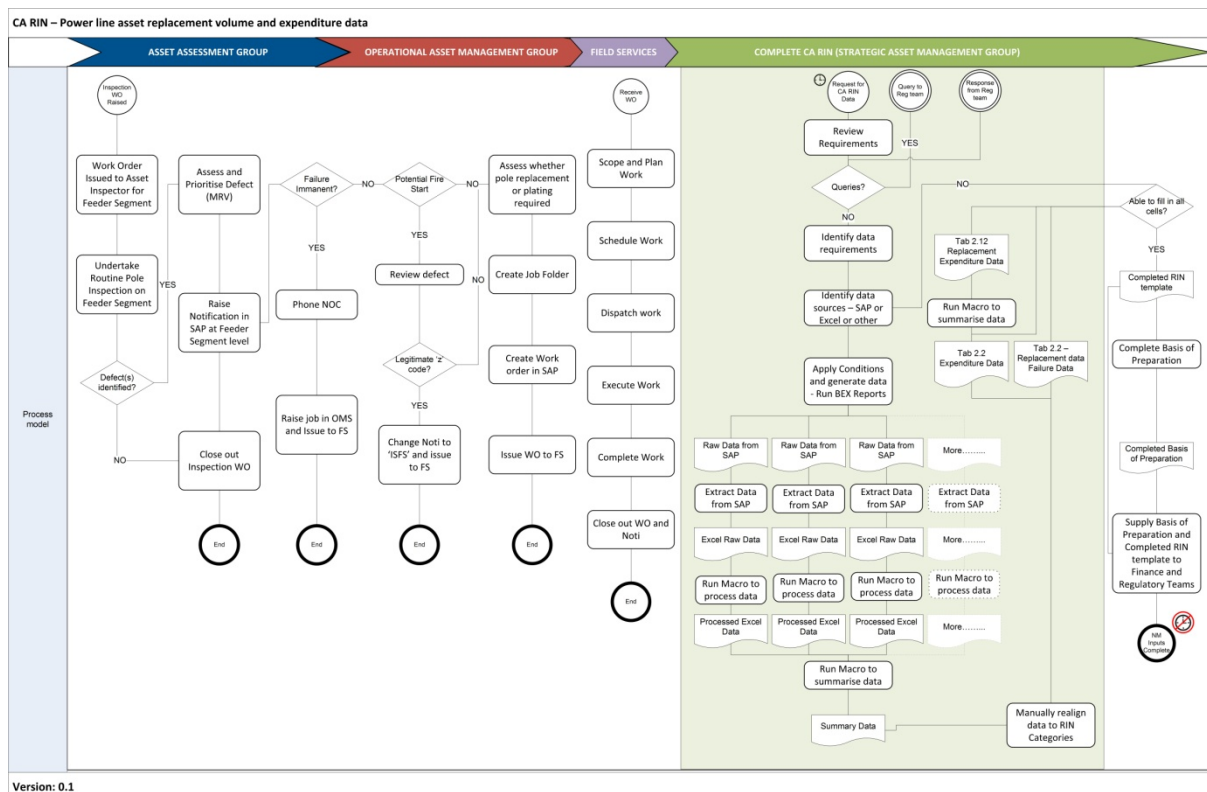
Planning/Scoping – the SAP notification is assessed by the Operational Asset Management group for complexity; if the replacement is straightforward, a work order is raised and issued to Field Services. For more complex replacements, additional work is undertaken prior to issuing the work order. One work order per notification is raised. Once Field Services receive the work order, a site visit is undertaken to scope the replacement asset including materials and equipment and any additional requirements such as traffic control. Materials are then ordered and arrangements made for delivery to the allocated depot. The switching request is submitted to the Network Control group and the work is scheduled into the forward work plan.

Replacement – on the planned date, the Field Services crew undertakes the pole replacement utilising the materials and equipment ordered. Once work is completed the work order is closed out in SAP by the Field Services crew with no additional information being recorded on work completed.

Asset Records – currently only essential (limited) changes are made to asset records as a result of a pole being replaced, unless the pole is relocated, (in which case additional information such as GPS data is updated in the GIS with the new location) or a change impacts the operation of the network, i.e. removal of HV lines.

Financial Settlement – financial settlement of the work order, and the costs including labour, are allocated to the feeder segment, with no additional settlement required.

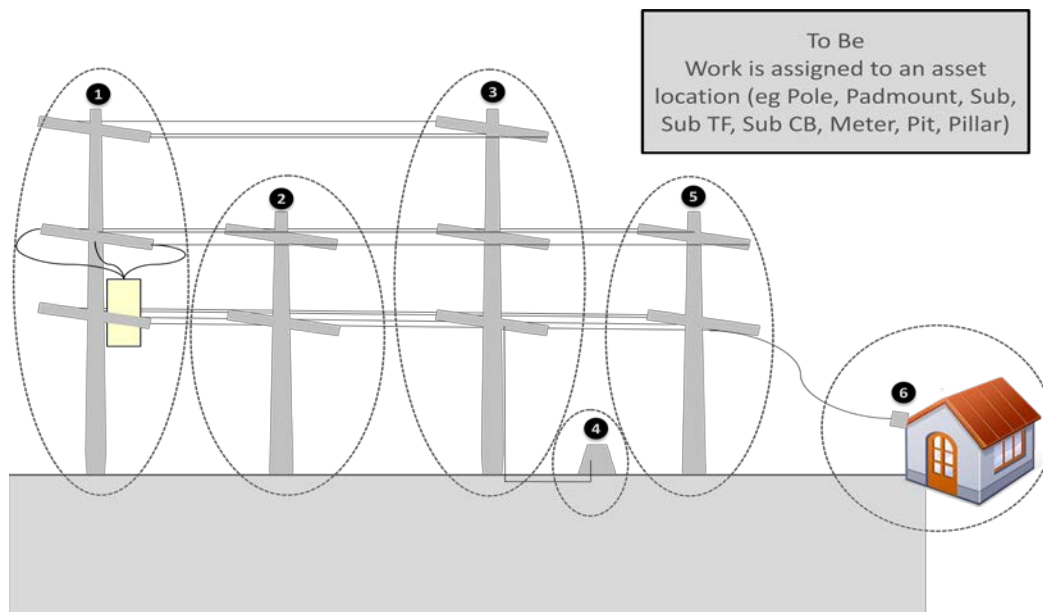
RIN Reporting - to populate the RIN data templates for asset replacement volumes and expenditure, the data (captured at the feeder segment level) is extracted from corporate systems including GIS, SAP and individual spreadsheets. It is then collated and assumptions applied based on subject matter expert opinion (eg divide the volumes and costs into the required categories) as per the process shown below. This involves a significant amount of work, and does not and can not result in reporting of 'actual' data.



Highlighted in green is the business process required to populate the CA and EB RIN templates.

'To be' manual process

To move away from management of the distribution network at a feeder segment level to physical asset management, fixed assets, such as poles, will be given status in their own right and treated as individual assets against which attributes (such as costs) can be assigned. This process will allow SA Power Networks to report more 'actuals' in the CA and EB RINs but a significant amount of 'estimates' will still need to be replaced. This change is illustrated in the figure below.



The replacement of a Stobie pole in the new process from inspection through to RIN reporting becomes:

Inspection – the inspection stage remains unchanged from that described under the current process.

Planning/Scoping – this stage of the process also remains unchanged from that currently undertaken.

Replacement – on the planned date, the Field Services crew undertake the pole replacement utilising the materials and equipment ordered. Under this amended process the crew will be required to record, utilising either a paper form or a device based equivalent, details of the equipment installed including full details of the pole installed including it's type, orientation, and details of all other equipment installed on the pole, such as cross arms, insulators, voltage of the conductors and any other details required to populate the corporate technical asset register. These records will be sent to the Network Records group for the next stage of the process. The recording of this information is expected to take around 0.5 hours (0.25 hours per crew member) per work order.

Asset Records – the Network Records group perform a quality assurance check on the data received. This includes checking all fields have been populated and the field contains data within defined parameters as set for the asset class, i.e. pole size must be one of the standard sizes. Once completed the GIS application will be checked to see if the pole currently exists in the system, and if so it does input any additional function location data. If it does not already exist, a new functional location will be created. The GIS information is then transferred to SAP. Within SAP the equipment records at that functional location will be updated with the new asset data for existing records, or the equipment will be created and allocated to the functional location for those locations newly created in GIS. All equipment records will be populated for the pole and all other associated installed equipment. This step is forecast to take up to 1 hour per work order for existing locations and assets, and around 0.75 hours for those locations not currently held in the GIS system. There is around a 3 month delay in the records being updated due the volume of data being handled by the Network Records group in relation to asset replacements and new assets created by SA Power Networks as a result of Customer Connection or augmentation projects, and also gifted assets.

Financial Settlement – financial settlement of the work order, and the costs, including labour, will be allocated to the equipment installed following cost allocation rules. This will need to be undertaken on a monthly basis for each piece of equipment installed. This is expected to take an additional 0.5

hours per work order when compared to the current process and will only be undertaken once a month.

RIN Reporting - to populate the RIN data templates for asset replacement volumes and expenditure the asset data, financial and non-financial, will be extracted from the GIS and SAP systems, as appropriate, using standard reports and used to populate the RIN templates.

As demonstrated, there is a significant impact to SA Power Networks to record actual information at the classification level required by the AER.

Modelling of the manual process was undertaken to gain a better understanding of the opex expenditure required to support the AER RIN requirements should the EAM and RIN Reporting projects be disallowed. The impact is shown in the table below and would cost the organisation approx \$23.2m over the five year period.

As stated earlier the EAM project delivers many other benefits as well as providing the backbone capability to deliver RIN compliance.

Table 1: Opex Costs associated with manual processes to capture actual data for RINs

June 2015, \$ million	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Manual Process	2.0	2.0	2.0	2.0	2.0	10.0
Veg Management	1.9	0	0	0	0	1.9
Material Governrs	0	0	0.8	0.8	0.8	2.5
Data Governrs	0	0	0.4	0.4	0.4	1.2
Internal Audit	0.2	0.2	0.2	0.2	0.2	1.0
Base Year 13/14	1.3	1.3	1.3	1.3	1.3	6.5
TOTAL	5.4	3.5	4.7	4.7	4.7	23.1

The forecast cost of \$23.1 (June, \$ million) includes \$6.5 (June, \$ million) of operating expenditure covering the costs related to complying with the RIN during the 2013/14 base year, costs largely consisted of:

- External Audit fees; and
- Incremental labour costs to co-ordinate RIN program;

'To be' system process

Following implementation of the improved EAM systems and process the replacement of a Stobie pole becomes:

Inspection – the Inspection stage remains unchanged from that described under the current process although the process includes accessing documents from SAP and updating directly into systems (**EAM Project and Enterprise Information Management**)

Planning/Scoping – this stage of the process also remains unchanged from that currently undertaken although the process includes accessing documents from SAP and updating directly into the systems. (**EAM Project, HR Systems and Intelligent Design Management System**)

Replacement – this stage of the process remains unchanged from the manual process detailed above, with the exception that the Field Services crew will be recording full details of the equipment installed on a mobile device and updating the technical asset records in real time. The recording of this information is expected to take around 0.25 hours per crew per work order. (**EAM Project, Field Force Mobility and Enterprise Information Management**)

Asset Records – the Network Records group will maintain a data governance and quality check role but will have no impact on the end-to-end process. **(EAM Project)**

Financial Settlement – financial settlement of the work order, and the costs, including working time, will be allocated to the equipment installed following cost allocation rules automatically, again in real time. **(Financial Management Project)**

RIN Reporting - to populate the RIN data templates for asset replacement volumes and expenditure the asset data, financial and non-financial, will be extracted from the GIS and SAP systems, as appropriate, using standard reports and used to populate the RIN templates. **(BI Enablement and RIN Reporting Project)**

See Appendix A for the high level business processes comparing manual collection of actual data vs system approach.

Table 2: Capex Costs associated with implementing the system approach to collect actual RIN data

June 2015, \$ million	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
EAM	3.9	12.6	5.5	5.2	3.8	31.0
RIN Reporting	4.0	4.6	4.3	1.9	0	14.8
Financial Management	1.7	1.1	0.2	0.6	1.5	5.1
HR Systems	0.6	0.2	0.5	0.2	0.0	1.5
Enterprise Information Management	0	1.2	1.3	0	0	2.5
BI Enablement	0	0.5	0.7	0.2	0.1	1.5
Intelligent Design Management System	0.3	0	0	0.5	1.4	2.1
TOTAL	10.5	20.2	12.5	8.6	6.8	58.5

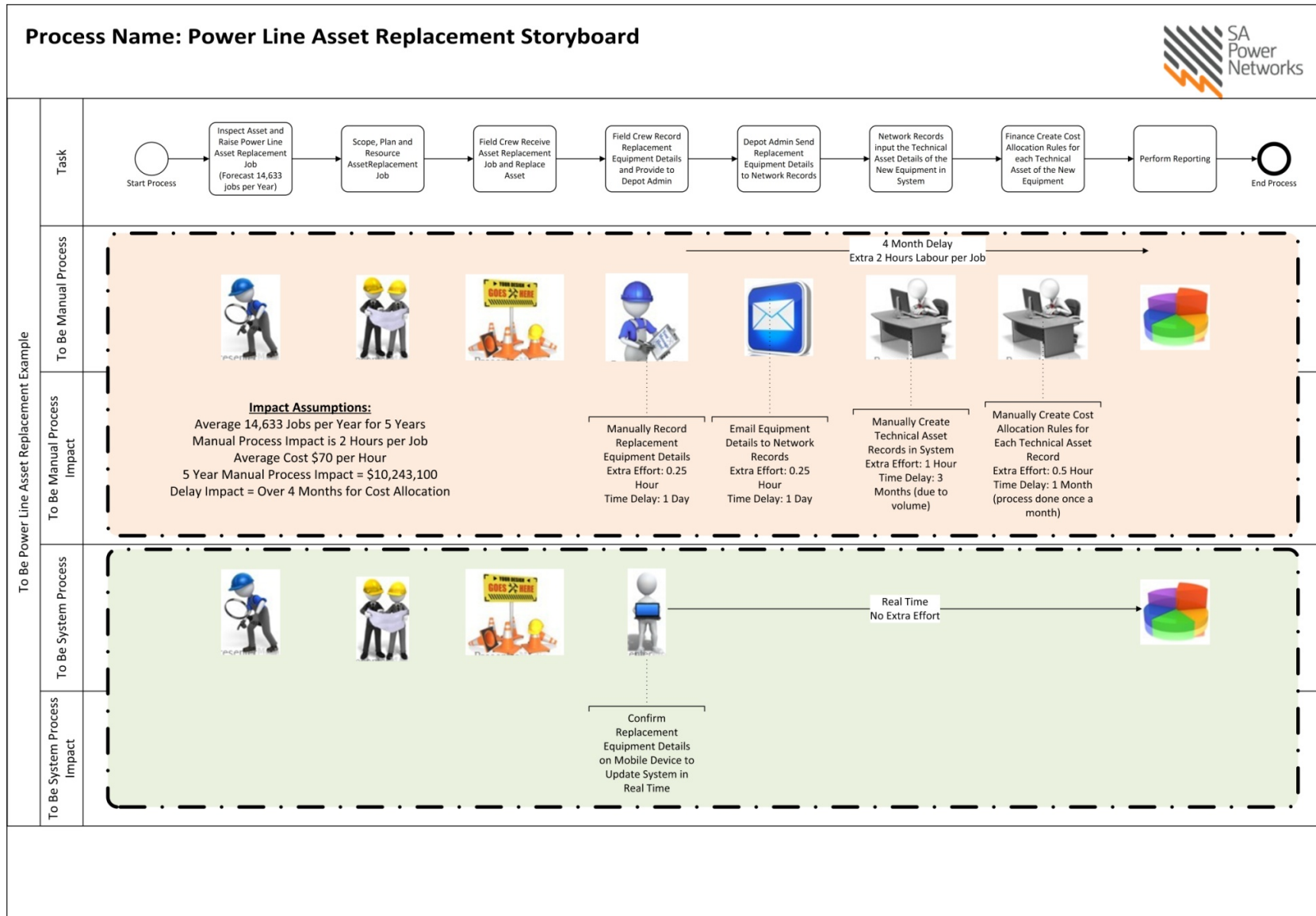
These capital cost have been included in our Revised Proposal and it is imperative these initiative are funded to enable the collection and reporting of information required in order to comply with the RINs. SA Power Networks considers these investments as the prudent and efficient way to meet RIN obligations.

If the projects are funded a further operating step change has been included in our Revised Proposal (\$6.4 million) to cover cost incurred in order to:

- facilitate the provision by our Vegetation Management contractor of ‘actual’ data via a one-off increase in vegetation scoping costs of \$1.8 (June 2015, \$ million) in 2016;
- train our workforce in relation to the new processes and systems;
- implement new data recording procedures and safeguards relating to data cleansing, data quality and audit (based on historical projects and lessons learned); and
- ensure full compliance with the new processes and systems.

If the capital initiatives are not included within the total forecast capital expenditure, SA Power Networks will require a material and ongoing increase in operating expenditure as detailed in Table 1. (includes the additional \$6.4 million stated above).

Appendix A



Appendix B

Table 1: Business cases which have dependent projects required for RIN reporting, the revised scope of these business cases in the 2015-20 RCP, the key capabilities to be delivered in the 2015-20 RCP and the remaining scope in the 2020-25 RCP. Projects highlighted in orange have scope implemented within both the 2015-20 RCP and 2020-25 RCP.

Business Case	Scope 2015-20 RCP	Key capabilities to be delivered in 2015-20 RCP	Scope in 2020-25 RCP
Dependent projects required to enable regulatory compliance			
Financial Management	<p>Long Term Business Planning & Modelling</p> <p>Financial Asset Register</p> <p>Financial Management and Reporting</p>	<p>To enable us to clearly understand the actual cost of an asset, the following improvements will be implemented:</p> <ul style="list-style-type: none"> • new General Ledger aligned to our asset base; • updated financial asset register; and • a number of improvements to our long term planning processes and tools. <p>Once these improvements are implemented, financial reporting will be realigned to meet both operational and RIN reporting requirements</p>	<p>Treasury & Cash Management</p> <p>Financial Close</p> <p>Financial Management Recurrent Upgrade</p>
Business Intelligence Enablement	<p>BI Operational reporting</p> <p>BI Enterprise and operational data warehousing</p> <p>BI Process and KPI Management</p>	<p>The Enterprise and Operational Data Warehousing capability will provide a central information storage containing current and historical data related to our assets.</p> <p>The associated toolset will enable the seamless flow of asset related information to and from the field in order to drive reporting and analytics.</p> <p>The Operational reporting functionality will provide the reporting and analytics tools required to enable more advanced asset performance and reliability management including an understanding of asset age, location, condition and risk and the ability to produce the RIN reports.</p>	<p>BI Competency Centre (BICC)</p> <p>BI Management Reporting</p> <p>BI Enterprise Performance Management</p>
Enterprise Information Management	Enterprise content and document management	The increased volume of information, documents and records being prepared will require formal and centralised records management and document management capabilities.	<p>Document Capture and Search (digitalisation)</p> <p>Web Content Management</p> <p>Enterprise Content Management</p>

Business Case	Scope 2015-20 RCP	Key capabilities to be delivered in 2015-20 RCP	Scope in 2020-25 RCP
		<p>Document and records management capability and tools will enable compliance with Acts, Regulations and Standards by prescribing a stronger content framework and providing an auditing capability. The capability (including Document Scan, Store, Search) will allow physical documents to be categorised and stored.</p> <p>This capability is required in order to implement the following initiatives (which, in turn, are required for RIN Reporting):</p> <ul style="list-style-type: none"> • Field Force Mobility requires work, design and safety documents related to an asset to be available online. • HR Systems requires documents related to qualifications of personnel to be available to identify who is authorised to work on specific assets. • Enterprise Asset Management will leverage Document Management to enable asset defect images, asset designs and other asset related information to be stored against an asset. <p>Finally, RIN Reporting will require a document management capability to ensure formal governance of documents, including a linkage to asset information.</p>	<p>System Upgrade Document and Content Management Upgrade</p>
<p>Intelligent Design Management System</p>	<p>Standards Group AutoCAD Build Substation Design Management System Vault Data Consolidation</p>	<p>The foundational design management capability will enable the registration of all asset designs and then enable design documents to be effectively managed over their entire lifecycle controlling and tracking design documentation. The design documents will be registered against an asset.</p> <p>Migration of various design systems into one central design system has been deferred to the 2020-25 RCP.</p>	<p>Migrate Microstation to Inventor and Vault Migrate ProEngineer to Inventor Load Windchill into Vault Pro Substation Automated Design Solution Plus SAP Integration CAD/GIS Integration CSO Basic AutoCAD build</p>

Business Case	Scope 2015-20 RCP	Key capabilities to be delivered in 2015-20 RCP	Scope in 2020-25 RCP
			Customer Solutions Modularised Drawings BOM and CU Integrated with CAD and SAP Telco AutoCAD Build Substation Engineering Design Despatch Migrate Microstation to AutoCAD
HR Systems	Core HR in SAP Centralised Employee Information, Performance & Goals, Compensation, Succession planning, Personnel Development On boarding, Recruitment, Learning, Work Force Planning Analytics Change Management	The ability to capture, store and report on AER role categories for personnel and enable the capture of costs per role as per AER's requirements. A single view of an employee (or contractor) will be implemented including the ability to: <ul style="list-style-type: none"> link personnel information to a role category both current and historically; link personnel with the correct qualifications to the work they do against an asset; payroll time entry against work which is linked to a role and to an asset. 	Enhance Pay Document Management and Travel Management
Dependent projects to enable regulatory compliance and business strategy			
Field Force Mobility	WP06 - Supporting Info Attachments and SAPN systems WP09 - Job Completion for all lines of business Field Mobility Safety Enhancements Single End User Interface Location based safety information Field Services Fatigue Management Heavy Vehicle Driving Hours Capture Automate the processing of job data for close out Rollout of Mobile Computing Street Level Routing Online Safety Audits	The workforce will have the ability to collect asset management information in a safe and timely manner via an improved mobile user interface. This information will improve decision making to ensure long-term sustainable performance and condition of assets. The workforce will be able to receive work directly, respond to calls regarding work on an asset and closeout work directly, and continue to meet expectations from customers for a safe, responsive	WP04 - Notes, News, Emails and Messages Spatial view of jobs and crew

Business Case	Scope 2015-20 RCP	Key capabilities to be delivered in 2015-20 RCP	Scope in 2020-25 RCP
	Field Services Mobile Inventory Mgt WP10 Mobile Time sheeting	service and transparent communication.	