SA Power Networks

Supporting document 5.30

Strategic Fleet Plan 2020-2025

2020-2025 Regulatory Proposal

18 January 2019

SA Power Networks

Strategic Fleet Plan 2020-2025.

18th January 2019

Version control

SECTION	DATE	VERSION NO.	CHANGE	BACKGROUND
All	29/10/2018	0.1 Draft	Initial draft outline of document for discussion	
All	2/11/2018	0.2 Draft	Updated 2015-2020 expenditure	
All	28/11/2018	0.3 Draft	Updated Compliance requirements and AG Comments	
All	7/1/2019	0.4 Draft	Updated Composition charts	
All	18/1/2019	0.5 Draft	Final review of document	

.

Accountability

Document Owner: Andrew Gianarakis
Title: Manager Fleet Management
Approved:
Date:

Document Author: Stephen Shinnick
Title: Fleet Business Manager

TABLE OF CONTENTS

1. Introduction

The Strategic Fleet Plan describes our fleet strategy, asset management plan and expenditure program for the 2020 - 2025 Regulatory Control Period (**RCP**) to meet our strategic objectives and operational business requirements.

SA Power Network owns and operates a range of fleet assets to enable delivery of the network program of work, including passenger and light commercial vehicles, heavy vehicles such as Elevating Work Platforms (**EWP**), cranes, line trucks, forklifts, trailers and associated plant and equipment.

The majority of our fleet is owned with Fleet Management being accountable as fleet process owner for core operational activities including the management, acquisition, standards and compliance, maintenance, replacement and disposal of fleet assets.

The Plan is reviewed regularly and updated as required to respond to any changing business requirements and ensure ongoing alignment with SA Power Network's strategic plan, directions and priorities.

The Strategic Fleet Plan is structured as follows –

Section 2: Context – provides a description of SA Power Networks' operating environment and sets the scene for the Strategic Fleet Plan, including key challenges and opportunities

Section 3: Strategic Direction and Operational Drivers – identifies SA Power Networks' strategic framework, key operational drivers and the fleet strategy, which articulates Fleet Management's strategic intent, core areas of focus and key outcomes

Section 4: Fleet Composition – outlines the current status and composition of SA Power Networks' fleet assets

Section 5: Fleet Management Lifecycle – describes the business-as-usual operational practices, management and governance arrangements across the fleet lifecycle, to deliver the fleet strategy

Section 6: 2015 - 2020 Period Performance – briefly describes the expenditure and operational performance over the current period

Section 7: 2020 - 2025 Fleet Program – outlines the fleet capital program of work and associated operating requirements for the 2020 - 2025 period
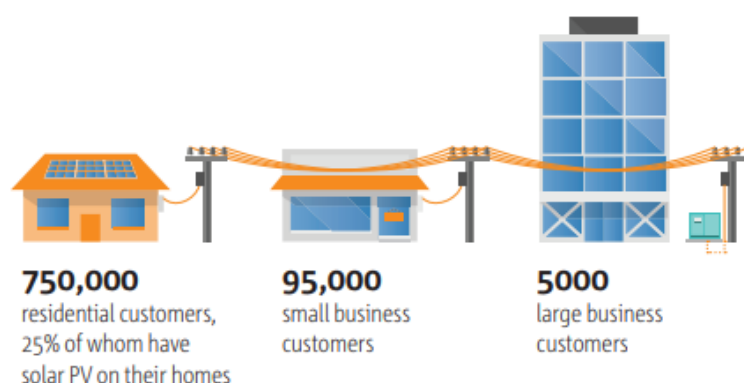
Section 8: Fleet Management Structure, Role and Functions – outlines the role and functions of the Fleet Management group and our internal and external fleet service providers.

2. Context

SA Power Networks has been delivering efficient, reliable and safe network performance for South Australians for almost 75 years. The electricity distribution network in South Australia is vast and complex, the network extends across difficult and remote terrain and operates in demanding conditions. 70% of the network is required to serve 30% of customers who live outside the Adelaide Metropolitan area.

400
zone substations

73,000
street transformers

720,000
stobie poles

90,000km
route length

Covering
178,000km²
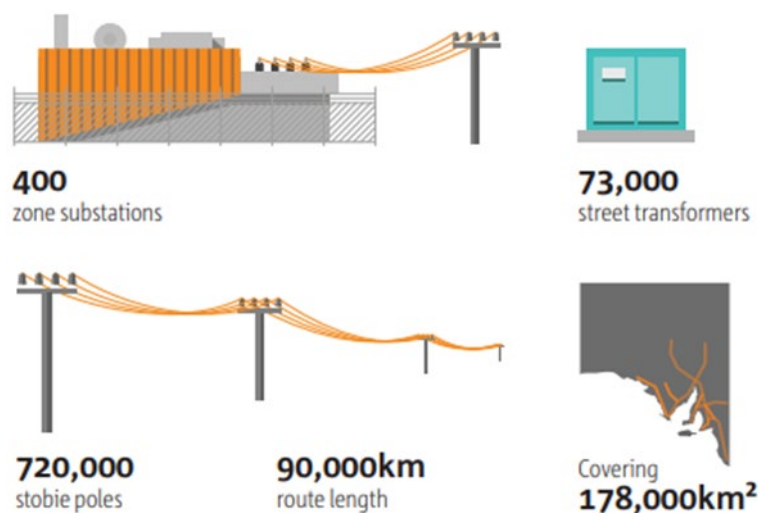
As the distribution network manager, SA Power Networks builds and maintains the poles, wires and substations that deliver power reliably and safely to around 850,000 customers. Our primary task is planning, building, operating and maintaining the electricity distribution network. To deliver this task we have over 800 field employees, operating from 30 operations depot across the State, supported by an operational fleet of over 1,300 units.

750,000
residential customers,
25% of whom have
solar PV on their homes

95,000
small business
customers

5000
large business
customers

SA Power Networks recognises that the entire electricity sector is experiencing unprecedented changes, including for example national reform, changes in customer and community expectations, new intelligent technology and participants in the market and environmental policies.

We recognise the significance of this change and the associated challenges and opportunities it brings, as reflected in our long-term strategic framework. The *SA Power Network's Future Operating Model, 2016-2031*, *SA Power Networks 2020-2025 Draft Plan,* and the *SA Power Networks Strategic Plan 2019-2023* sets out the long-term vision, strategic direction and priorities for the business.

Within this context, the role of Fleet Management is to support the business both in the long-term as it negotiates a rapidly changing environment, and in the day to day operations of the business in the delivery of efficient, reliable and safe network performance.

Key challenges and opportunities for Fleet Management include:

- continuing to provide fit-for-purpose, safe and compliant vehicles to the business in a timely manner to enable the efficient and effective delivery of the businesses' strategic direction and operational requirements;

- ensuring ongoing compliance with the range of legislative and regulatory compliance obligations across the fleet management lifecycle; and

- remaining up-to-date with new and emerging industry innovations and employing the appropriate technologies into our fleet assets to ensure optimum safety, mobility and productivity of our employees in the most-efficient manner.

3.   Strategic Direction and Operational Drivers

3.1   SA Power Networks' strategic framework

SA Power Networks' strategic framework is comprised of three core documents. These include –

- *SA Power Networks Strategic Plan 2019 to 2023*
- *SA Power Networks 2020-2025 Draft Plan*
- *SA Power Network's Future Operating Model, 2016-2031.*

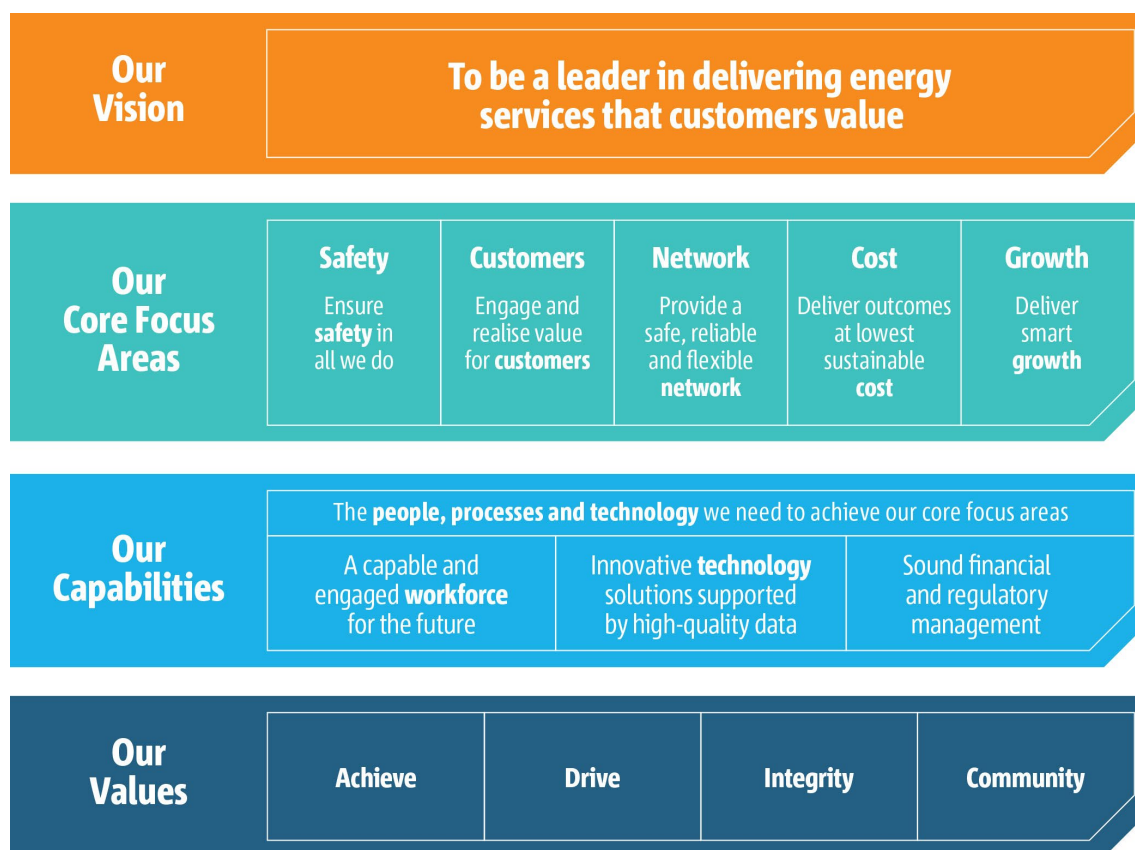### SA Power Networks Strategic Plan 2019 - 2023

The *SA Power Networks Strategic Plan 2019 to 2023* reflects the businesses' need to continue investing in the capabilities of our people and the processes and technology we need to achieve in our core focus areas of:

- Safety
- Customers
- Network
- Cost and Growth

Our Strategic Framework, and the supporting core focus areas, capabilities and values described in the Strategic Plan, provide clarity and guidance to the organisation to successfully implement our strategy. As illustrated in Figure 1, SA Power Networks' strategic framework includes:

- Our Vision – 'To be a leader in delivering energy services that customers value'
- Our Core Focus Areas – Safety, Customers, Network, Cost, and Growth
- Our Capabilities – People, processes and technology needed to achieve our core focus areas.
- Our Values – Achieve, Drive, Integrity and Community

Figure 1 – SA Power Networks strategic framework

Our Vision	To be a leader in delivering energy services that customers value				
Our Core Focus Areas	**Safety** Ensure **safety** in all we do	**Customers** Engage and realise value for **customers**	**Network** Provide a safe, reliable and flexible **network**	**Cost** Deliver outcomes at lowest sustainable **cost**	**Growth** Deliver smart **growth**
Our Capabilities	The **people, processes and technology** we need to achieve our core focus areas				
	A capable and engaged **workforce** for the future	Innovative **technology** solutions supported by high-quality data		Sound financial and regulatory management	
Our Values	**Achieve**	**Drive**	**Integrity**	**Community**	

SA Power Networks 2020-2025 Draft Plan

SA Power Networks 2020-2025 Draft Plan outlines how we will continue to meet all our obligations for safety, reliability of supply, customer service. It balances investment in maintaining a safe and reliable network and ensuring we can accommodate the changing ways customer are using energy, with the real need to keep our costs down.

Of particular relevance to the Strategic Fleet Plan, the 2020-2025 Draft Plan identifies the need to enhance our information systems, depot facilities and fleet to ensure we have a sufficient and competent skilled workforce to deliver these services.

SA Power Network's Future Operating Model, 2016 – 2031

The SA Power Networks 2016-2031 Future Operating Model provides a renewed perspective on what the future world looks like for our customers and our network, and on how our work will change to meet the new challenges and opportunities. Our field services team will still be delivering many of its core services – restoring power, conducting routine maintenance, and managing vegetation. The main differences will be in the range of technologies used, the amount of information and the quality of communication with customers.

Fleet Management recognises that our vehicles will remain a key resource enabling future technologies and will require significantly more on-board computing power and functionality, including the ability to access real-time information on network asset performance.

3.2   Fleet operational drivers

In addition to our strategic priorities, there are a number of key operational drivers of fleet expenditure. These include –

- **Network program of work** – The network program of work is a key driver of fleet expenditure. Significant investment is needed over the next decade to replace our ageing assets in order to maintain the network's reliability and performance into the future. Forecast work volume and

employee growth has a material influence on the level of resourcing required across non-network parts of the business, including fleet, to support delivery of the network program of work. The different type of network investment required (e.g. augmentation, customer connections, asset replacement etc.) influences the quantity and type of fleet assets and associated plant and equipment required to support delivery of the network program of work.

- **Fleet replacement criteria** – Effective management of the fleet replacement plan is critical to ensuring the efficient delivery against the businesses' operational requirements with minimal disruption. The replacement plan is based on SA Power Network's fleet replacement criteria, which are either age/kilometre based, or age and condition based in accordance with legislative requirements, manufacturers' recommendations and industry practice. The replacement criteria is reviewed on a regular basis, and updated as required in order to maximise performance of fleet assets in terms of cost and operational reliability and to ensure ongoing compliance with legislative obligations.

- **Compliance requirements** – Compliance with relevant Australian and International standards, legislative requirements, codes of practice, design rules, environmental considerations and safety requirements across the fleet management lifecycle is a critical and ongoing driver of fleet performance and expenditure. A list of key compliance requirements is outlined at Table 1.

Table 1 – Compliance requirements

Compliance Type	Key Requirements
Legislation	• South Australian Road Traffic Act and Regulations • South Australian Motor Vehicles Act and Regulations • Work Health and Safety Act and Regulations 2012 • Compliance and Enforcement Legislation • Heavy Vehicle National Law and Regulations
Australian Standards	• AS 1418 Set: 2009 – Cranes, hoists and winches • AS 2550 Set: 2011 – Cranes, hoists and winches – safe use • AS 1657: 2013 – Fixed platforms, walkways, stairways and ladders • AS/NZS 154 – Structural steel welding • AS2759 – Steel wire rope – Use, operation and maintenance • AS/NZS 1891.4:2009 – Industrial fall-arrest systems and devices • AS/NZS 3000 – Electrical Wiring Rules • AS:3788 - Pressure Equipment – in service inspection
International Standards	• EN280: - International Standards and Safety Devices and Inspections • Various relating where referenced by Australian Standards • Environmental, including Euro 6 • ANSI A92.2: Vehicle Mounted Elevating and Rotating Aerial Devices
Australian Design Rules	• Australian Design Rules for Motor Vehicles and Trailers
Codes of Practice	• Mobile Crane Code of Practice 2006 (planned to be replaced under NHVL changes by Crane Industry Road Safety Code of Practice) • NHVL Mater Industry Code of Practice (currently awaiting approval and registration)

Compliance Type	Key Requirements
Safety Requirements	• SafeWork SA • ANCAP safety ratings (Australasian New Car Assessment Program)

- Fleet standards and specifications – Fleet Management maintains designs and specifications for all fleet assets to ensure vehicle selection and acquisition are cost-efficient, fit-for-purpose and undertaken in accordance with all relevant compliance requirements. The fleet standards and specification are developed taking into account market research, industry practice and benchmarking with other Distribution Network Service Providers (**DNSP**).

- Technology – New technology can play a significant role in improving the safety, mobility and productivity of our workforce and is therefore an important consideration during the fleet planning process. New vehicle technology will only be commissioned and rolled-out; however, this will occur following significant market research and analysis, approval of a robust business case, including detailed options and financial analysis, and a successful pilot in an appropriate number of vehicles.

- Other requirements – Other drivers that influence the development of the Strategic Fleet Plan and expenditure program include:

  o Changing business requirements for example changes in the network program of work or responding to emergency situations; and

  o SA Power Networks directives, policies, practices and procedures required to manage our fleet assets across the fleet management lifecycle.

3.3 Fleet Management strategy

The Fleet Asset Life Cycle framework is comprised of this Strategic Fleet Plan, Fleet 10-Year Capital Plan, Annual Replacement Plan, Business Plan and Budget. Each of these are focussed on the delivery of the fleet management strategy, which has been developed taking into account the overall strategic framework, direction and priorities, operational drivers and through consultation with our internal and external stakeholders. The fleet management strategy articulates our strategic intent, core areas of focus and key objectives as follows.

Strategic intent

Our strategic intent is '*the provision of optimum Fleet Management planning and services to SA Power Networks to enable the business to achieve its strategic priorities and objectives.'*

Core areas of focus

Four of the organisation's core focus areas are of particular relevance to Fleet Management in delivering an optimum fleet management framework:

- Ensure **safety** in all we do;

- Engage and realise value for **customers**;

- Provide a safe, reliable and flexible **network**, and

- Deliver outcomes at lowest sustainable **cost**.

Key objectives

To achieve our strategic intent and core areas of focus, Fleet Management is focussed on the delivery of the following key objectives:

- *Customer satisfaction* – Ongoing consultation with our customers and high levels of responsiveness to ensure ongoing customer satisfaction

- *Engagement* – Ongoing engagement with our staff and internal stakeholders to continue to identify and respond to their needs as they evolve

- *Operational excellence* – Provision of fit-for-purpose vehicles in a cost-effective and timely manner to enable the efficient and effective operation of the business

- *Safety and compliance* – Vehicles acquired and maintained in accordance with legislative requirements and standards to maximise the safety, operational reliability and availability of our fleet for customers

- *Effective partnering* – Effective and professional relationships with our internal and external service providers to promote delivery of cost-effective business outcomes

- *Technical capability* – Ensuring a high level of core capability and technical expertise to identify, evaluate and provide optimal solutions to our customers

- *Robust planning, management and governance* – Clearly defined roles and accountabilities and effective planning, management and governance across the fleet management lifecycle to ensure we achieve our strategic intent and core areas of focus.

Figures 2 and 3 demonstrates the relationship between the philosophy of Fleet Asset Management Lifecycle and SA Power Networks strategic framework, operational drivers, fleet planning framework and the fleet strategy.

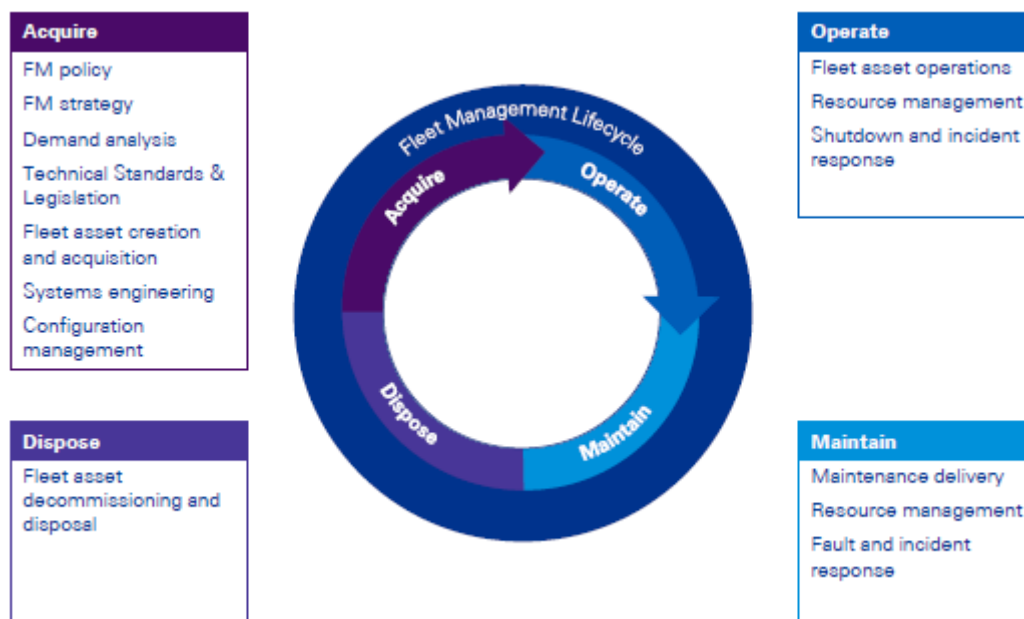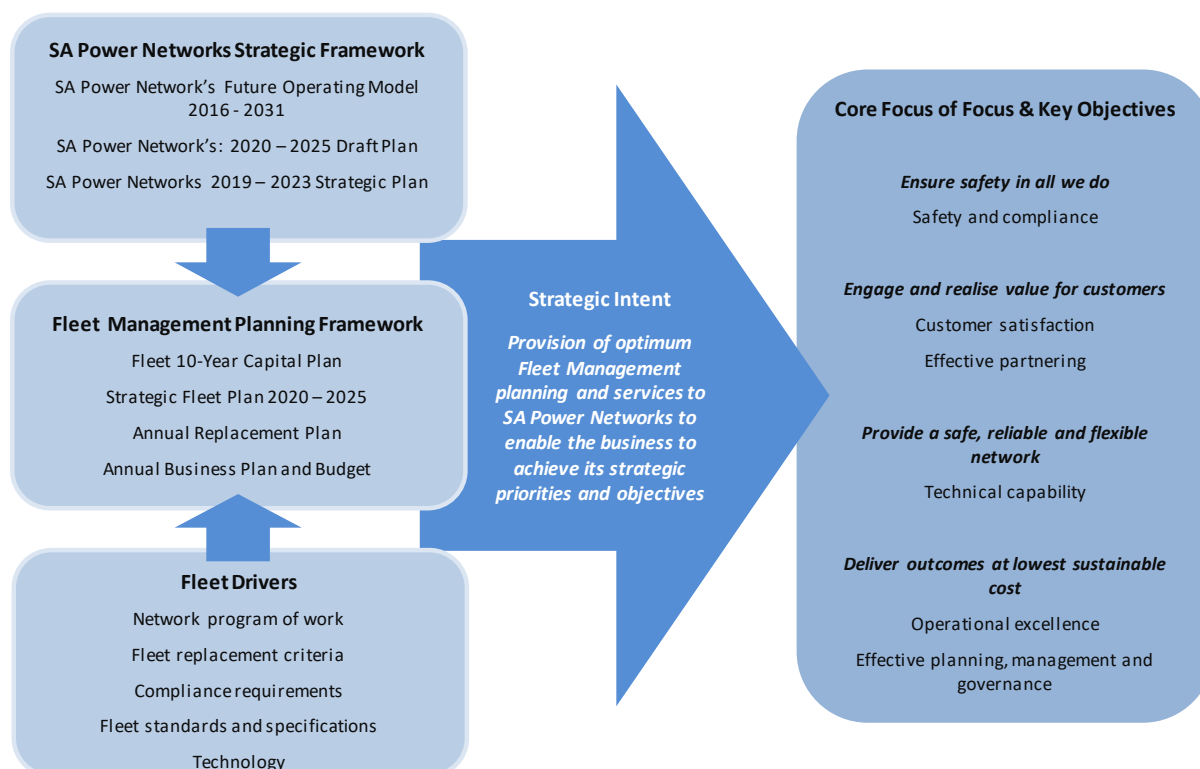**Figure 2 – Philosophy of Fleet Asset Management Lifecycle**

Acquire
- FM policy
- FM strategy
- Demand analysis
- Technical Standards & Legislation
- Fleet asset creation and acquisition
- Systems engineering
- Configuration management

Operate
- Fleet asset operations
- Resource management
- Shutdown and incident response

Dispose
- Fleet asset decommissioning and disposal

Maintain
- Maintenance delivery
- Resource management
- Fault and incident response

Figure 3 - SAPN Fleet Management strategic framework for delivery

SA Power Networks Strategic Framework

SA Power Network's Future Operating Model 2016 - 2031

SA Power Network's: 2020 – 2025 Draft Plan

SA Power Networks 2019 – 2023 Strategic Plan

Fleet Management Planning Framework

Fleet 10-Year Capital Plan

Strategic Fleet Plan 2020 – 2025

Annual Replacement Plan

Annual Business Plan and Budget

Fleet Drivers

Network program of work

Fleet replacement criteria

Compliance requirements

Fleet standards and specifications

Technology

Strategic Intent

Provision of optimum Fleet Management planning and services to SA Power Networks to enable the business to achieve its strategic priorities and objectives

Core Focus of Focus & Key Objectives

Ensure safety in all we do

Safety and compliance

Engage and realise value for customers

Customer satisfaction

Effective partnering

Provide a safe, reliable and flexible network

Technical capability

Deliver outcomes at lowest sustainable cost

Operational excellence

Effective planning, management and governance

Risk register and key performance indicators

Tables 2 and 3 set out our risk register and our key performance indicators.

Table 2 – Risk Register

Risk No.	Key Risk Name	Descriptor
1	Injury/death from breach of OHS Policy and procedures.	• Vehicle design and commissioning does not meet our business fit for purpose requirements, our safety rules, legislative requirements, Australian Design Rules, Australian Standards and State Road Authority Standards resulting in non-compliant vehicles that can lead to reduced safety, financial loss and operational impacts. • Lack of adequate servicing and maintenance regime leading to unsafe and non-compliant vehicles that can result in death, serious injury, financial loss and operational inefficiency. • Vehicle replacement criteria results in poor vehicle condition leading to reduced vehicle safety and compliance. • Lack of compliant heavy vehicle inspection regime leads to death or serious injury, financial loss and operational inefficiency. • Inability to effectively manage remote, lone, and mobile employee's safety, wellbeing and driving behaviour.
2	Financial management – Loss, error or non-compliance due to out of date policy, process, procedure and accountability	Factors can include: • Lack of Fleet succession plan to manage critical Fleet roles and functions in the future, leading to operational inefficiency.
3	Regulatory /operational and financial disconnect	Factors can include: • Lack of internal labour to cope with the demands of the increased program of works resulting in non-delivery. • Lack of visibility of the program of works in the context of work type, work volume, work location, and employee numbers that impacts the ability to plan and deliver appropriate Fleet and associated plant to deliver the work program leading to operational inefficiency and financial loss.
4	Loss caused through inadequate performance by key suppliers	For example: • Inability of suppliers to meet deadlines for critical items that lead to operational inefficiency and financial loss. • Reliance on third party provider for critical fleet management data to meet operational requirements, regulatory and other reporting obligations.
5	Sub-optimal operational processes or poor commerciality in business units drives inefficiency and unclear accountability	• Inadequate fleet structure that does not support optimum internal customer service and prudent management of fleet assets resulting in operational inefficiency, poor customer service and financial loss.

The risk register is reviewed on an annual basis and mitigation strategies developed and implemented for each item.

Table 3 – Key Performance Indicators

| Business KPI's	Descriptor
Finance	• Capital Expenditure vs plan • Operating Expenditure vs plan • Operating recoveries vs opex • Disposal income ves written down value (WDV)
Safety - General	• Zero Lost Time Injuries (LTIs) • Zero Medical Treatment Injuries (MTIs) • Near misses reported
Safety - Fleet	• IVMS performance • Driving incidents • Driving infringements

Fleet
- Governance / Compliance
	• Compliance with legislative and business driven safety inspections
	  o 3 monthly routine inspections of EWP's and Cranes
	  o 12 monthly periodic inspections of EWP's and Cranes
	  o Major Inspections of EWP's and Cranes
	  o Trailer and vehicle inspections
	• Vehicles tagged out as a result of inspections
	• Close out of corrective action notifications post inspections
	• Defect notifications overdue
	• Vehicles over due for service

Fleet - Metrics	• Fleet Availability • Fleet Composition – Assets, Leased and Hire vehicles
Employee Engagement	• Sick leave (inc long term and family leave) • Annual leave

4.   Fleet Composition

Our strategic approach has traditionally been to purchase (rather than lease) the vast majority of its non-system assets, including fleet assets, for the delivery of its network program of work. SA Power Networks therefore owns the majority of its fleet assets except where the business has chosen to lease vehicles to deal with short-term requirements or where suitable purchase options are unavailable.

Our fleet composition (i.e. the number of type of fleet assets) reflects the strategic and operational requirements of the business. The current composition and age profile of our fleet assets as at 30 June 2018 is shown at Figure 4.

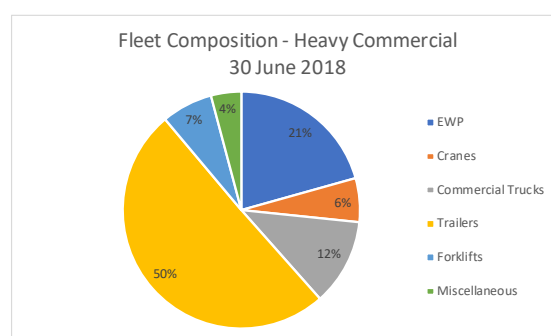**Figure 4: Fleet composition as at 30 June 2018**

Passenger / Light Commercial	669
EWP's	145
Other Commercial	557
TOTAL	**1371**
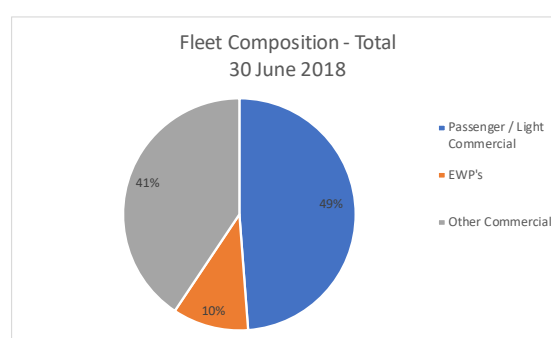
Light Commercial	515
Passenger	67
TEC	87
TOTAL	**154**
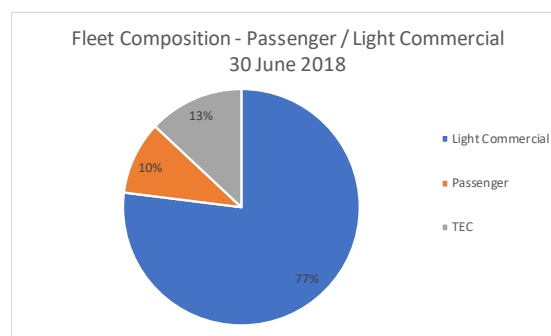
EWP	145
Cranes	42
Commercial Trucks	83
Trailers	354
Forklifts	49
Miscellaneous	29
TOTAL	**702**

Fleet composition history

Fleet Composition History

Fleet Age Profiles

Passenger / Light Commercial Age Profile

EWP's and Cranes Age Profile

Commercial Trucks Age Profile

Trailers and Miscellaneous Items Age Profile
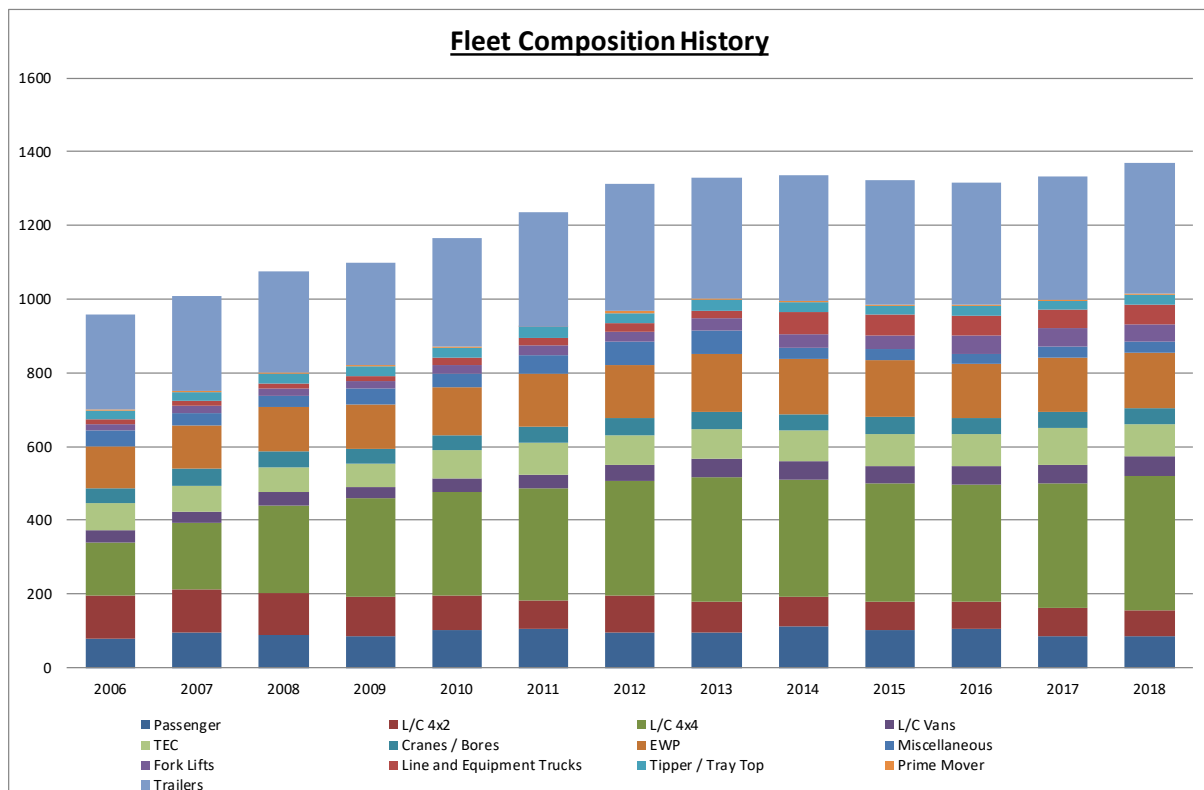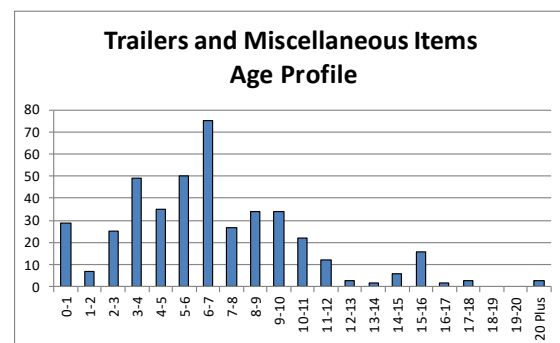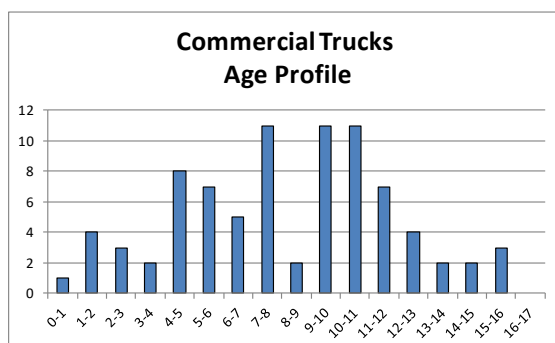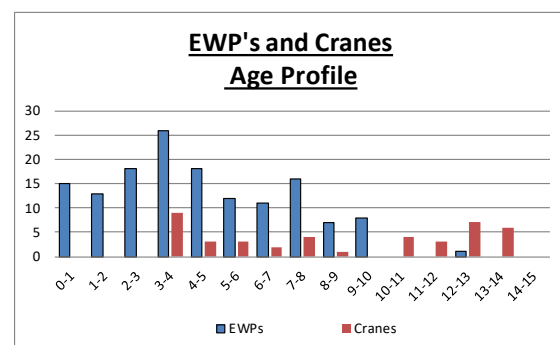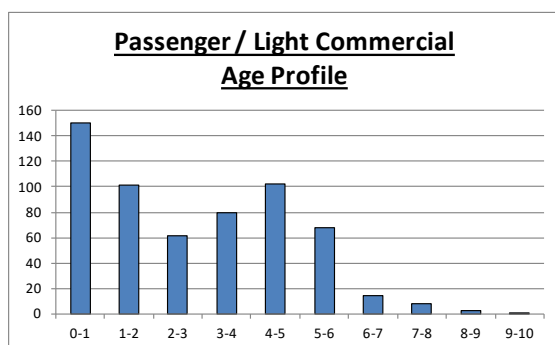
5. Fleet Replacement Criteria

The Fleet replacement criteria is driven by legislative requirements, manufacturers' recommendations and good industry practice.

During the current regulatory period of 2015 – 2020 we changed our replacement criteria for trailers from 20 years to 15 years. These changes were driven by an increasing number of trailers being replaced early due to poor condition and safety concerns. The change will ensure that our trailers are fit-for-purpose, and compliant to enable the efficient and effective delivery of the network program of work.

All other replacement criteria is proposed to remain unaltered for the 2020 – 2025 regulatory control period

Table 4: Current Vehicle Replacement Criteria and Crane Inspections

Current Replacements Criteria

Type of Vehicle	Explanation
EWP's	10 years Replacement based on Fleet procedures. Vehicle life may be extended where condition warrants it, not common to extend.
Cranes	14 years Replacement based on Fleet procedures. Vehicle life may be extended where condition warrants it.
Heavy Commercial Vehicles	15 years Replacement based on Fleet procedures. Vehicle life may be extended where condition warrants it.
Trailers	15 years Replacement based on Fleet procedures. Trailer life may be extended where condition warrants it.
Other Specialist Equipment	20 years Replacement based on Fleet procedures. Vehicle life may be extended where condition warrants it.
TEC	3 years or 90,000 kms.
Passenger Vehicles	5 years or 150,000 kms.
Light Commercial	5 years or 150,000 kms.

Inspections of Cranes

Type of Vehicle	Explanation
Cranes	Major Inspections at 10 Years. As required by Australian Standards under the Occupational Health, Safety and Welfare Act, units shall be subject to a major inspection (Non-Destructive Testing (NDT) Rebuild) when they have been in use for a period of 10 years.

6. Fleet Management Lifecycle

A Fleet Lifecycle philosophy is applied to the management of SAPN fleet assets. To achieve this philosophy, fleet assets are managed and operated in accordance with a *Plan – Build – Run – Manage* model. Figure 5 provides an overview of the key activities, core documents, key accountabilities and outcomes for each stage of the fleet lifecycle.

Figure 5 – Fleet management lifecycle

Stages	PLAN	BUILD	RUN	MANAGE
Key Activities	Develop fleet plans following: • Review of corporate strategies • Consultation with internal stakeholders • Identification of operational requirements • Review of fleet replacement plan and criteria • Review of compliance requirements • Industry research and analysis	• Vehicle acquisition and build in accordance with Replacement Plan • Research asset requirements, market availability, types, options, delivery costs • Vehicles purchased and delivered in accordance with procurement procedures and fleet specification and standards	• Assets maintained in accordance with Maintenance and Operating Works Plans • Fleet assets inspected and maintained in accordance with legislative requirements • Fleet Assets identified for disposal in accordance with Replacement Plan • Vehicles decommissioned, sold at auction and removed from Asset Register	• Management of internal resources & budgets • Risk identification and mitigation • Manage relationships with internal & external service providers • Compliance monitoring • Monthly performance reporting • Administrative processes
Core Documents	• Fleet Lifecycle – Planning Procedure • Strategic Fleet Plan • Fleet 10 Year Capital Plan • Fleet Replacement Plan • Fleet Annual Business Plan • Fleet Annual Budget • Business Cases	• Fleet Lifecycle – Acquisition Procedure • Fleet specification & standards • Procurement Directive and Fleet Procurement Strategy • Capital Expenditure Directive • Project Authority • Asset Register and corporate databases	• Fleet Lifecycle – Maintenance & Disposal Procedures • Fleet Maintenance and Operating Works Plans • Update Asset Register and corporate databases • Vehicle logbook • Inspection reports	• Fleet Lifecycle – Quality Management Manual • Corporate Governance Manual • Fleet Directive • Risk Management Policy & register • Partnering and Service Level Agreement and work plans • Monthly performance reports
Key Accountabilities	• Manager Fleet Management • Fleet Business Manager	• Fleet Acquisitions Manager • Fleet Management Advisors • Purchasing & Contracts team	• Manager Fleet Management • Workshop Manager • Fleet Standards and Compliance Manager • Fleet Management Advisor – Disposals	• Manager Fleet Management • Fleet Standards and Compliance Manager • Fleet Business Manager
Approvals	• General Manager • Finance Expenditure Review Committee	• As per corporate Financial Authorities	• Manager Fleet Management • Workshop Manager	• General Manager • Risk Management & Compliance Committee?
Outcomes	*Effective fleet planning aligned to SA Power Networks strategic direction, priorities and operational requirements*	*Provision of fit-for-purpose vehicles in a cost-effective and timely manner to enable the efficient and effective operation of the business*	*Vehicles maintained in accordance with compliance requirements to maximise the safety, operational reliability and availability of fleet for our customers*	*Quality management of fleet resources, budgets and internal and external service providers and robust governance across the fleet lifecycle*

The *Plan – Build – Run – Manage* model provides a clear and structured framework and approach to the management and operation of our fleet assets, aligned to the *Fleet Lifecycle procedures*. Robust governance arrangements are fundamental across the fleet lifecycle. A brief description of each stage is provided below.

Plan

The 'Plan' phase is focussed on the development and review of the fleet management planning framework in accordance with the *Fleet Lifecycle – Planning Procedure*. The procedure outlines the process from planning and approval of budgets to post implementation review of the plan at the end of the relevant financial year. Core planning documents include the *Strategic Fleet Plan*, *Fleet 10 Year Capital Plan*, *Fleet Replacement Plan, Annual Business Plan and Budget.*

At a high-level the 'Plan' stage involves:

• consideration of any changes to SA Power Networks' strategic direction and priorities;

• consultation with the business to determine business requirements and operational drivers, including any changes to work practices and procedures.

- annually reviewing the fleet replacement requirements against the fleet replacement criteria;

- reviewing the fleet replacement criteria to determine whether any changes are required to optimise fleet performance;

- undertaking market research to consider industry trends, innovations and new technology, and changes to safety, environment and other compliance obligations;

- reviewing the 10-Year Capital Plan and Fleet Strategic Plan and updating as required;

- development of the annual Replacement Plan and budget; and

- approval of the updated Fleet planning documents and budget by the Chief Financial Officer (CFO).

At the end of the 'Plan' stage, Fleet Management has a clear understanding of business needs, which is reflected in the replacement plan, key fleet initiatives and approved budget for the next year.

Any material variations requiring additional funding during the year requires the prior approval of the CFO.

At the end of the year, a Post Implementation Review (PIR) is undertaken, which identifies any financial variations to the approved plan. The PIR is presented to the CFO for review with 'lessons learnt' used to inform future planning processes.

Build

The 'Build' stage is focussed on the acquisition of fleet vehicles in accordance with the *Fleet Lifecycle – Acquisition* procedure. The procedure outlines the process from issuance of the Fleet Replacement Plan to the Fleet Management Advisors (FMAs) for the acquisition and delivery of fleet assets to end users. Key documents during this stage include the *Fleet Replacement Plan, Fleet and Vehicle Safety Directive, Procurement Directive, and Financial Authorities*.

At a high level, the 'Build' stage involves:

- issuing the approved annual Replacement Plan to the FMAs, ensuring a clear understanding of the replacement criteria and approved funding detailed in the plan;

- undertaking comprehensive market research to assess the availability, options, delivery and costs of specific vehicles, plant and associated equipment;

- consulting with end-user groups for final selections on the basis of the results of the market research;

- obtaining quotes from vendors in accordance with the Procurement Directive;

- identifying the preferred vendor, generating Project Authorities for approval in accordance with SA Power Network's Financial Authorities and proceeding with acquisition through the Procurement and Contracts business unit;

- notifying the training centre of the procurement and scheduling training with the manufacturer, where required;

- carrying out periodic inspections at critical manufacturing stages, including risk assessments;

- accepting vehicle delivery, undertaking risk assessment of new assets; and

- delivery of the vehicle or equipment, including training where required, and possession of replaced asset for disposal.

Run

The 'Run' stage is focussed on the servicing, maintenance and disposal of fleet assets in accordance with the *Fleet Lifecycle – Maintenance* and *Disposal* procedures. The procedure outlines the process pertaining to the maintenance of vehicles across their useful life and disposal of vehicles following replacement. Key documents during this stage include the *Fleet Operating Works Plans and Replacement Plan*.

Fleet Operations Group executes the plan on behalf of Fleet Management. At a high level, the maintenance component of the 'Run' stage involves:

- development of the annual Fleet Operating Works Plan by Fleet Management;

- maintaining all vehicles in accordance with the Fleet Operating Works Plans;

- ensuring that all internal and external databases are maintained to reflect all servicing, maintenance and rebuild works; and

- preparation of monthly reporting by Fleet Operations and analysis of monthly reports by Fleet Management.

The process for disposal for vehicles is managed by Fleet Management. At a high level, the disposal component of the 'Run' stage involves:

- decommissioning of vehicles;

- delivery to auction house and determining asset reserve value;

- cancellation of registration and disposal of asset at auction;

- reconciliation of the documentation including the confirmation of receipt of payment; and

- updating the Asset Register.

Manage

The 'Manage' stage is focussed on quality management and robust governance, across the fleet lifecycle, to ensure the efficient and effective use of fleet assets and resources. Key documents include SA Power Networks' *Corporate Governance Manual*, incorporating the *Fleet and Vehicle Safety Directive, Procurement Directive,* and the *Fleet Lifecycle Procedure*.

At a high level, effective fleet management and governance involves:

- ongoing monitoring and management of internal resources and budgets;

- identification and management of risks;

- inspecting fleet and monitoring compliance with legislative and WH&S requirements;

- managing our professional relationships with internal and external service providers, including negotiating and monitoring work in accordance with work plans; and

- monitoring and reporting against expenditure forecasts and key performance indicators, allowing decisions and strategies to be adjusted as necessary.

7.   2015 - 2020 Period Performance

The fleet expenditure program across the current period was driven by:

• heavy and light vehicle replacement requirements;

• compliance with legislative obligations.

Fleet expenditure versus the AER's approved allowance for the current period is shown in Table 5.

Table 5 – Current period fleet expenditure

(June 2015, $million)

	2015/16 (Actual)	2016/17 (Actual)	2017/18 (Actual)	2018/19 (F'cast)	2019/20 (F'cast)	Total
AER allowance	36.6	23.9	18.8	20.5	23.1	**122.9**

(2017, $million)

Current period expenditure	2015/16 (Actual)	2016/17 (Actual)	2017/18 (Actual)	2018/19 (F'cast)	2019/20 (F'cast)	Total
AER allowance	39.866	22.456	16.153	19.193	31.425	**129.093**
Actual expenditure	14.773	14.110	18.857	20.579	20.390	**88.708**
Variance	(25.093)	(8.346)	2.704	1.386	(11.035)	**(40.385))**

During this regulatory period an overall lower fleet cost was achieved in comparison to the AER allowance as a result of
- operating in a highly competitive supply market for fleet and associated equipment.
- initiating an enhanced standardisation philosophy, where many safety features are included within the standard vehicle specifications that were once optional extras.
- procurement contracts (leveraging relationships with key vendors)
- vehicle selection (fit for purpose)
- increase use of external contractors to facilitate the uplift in the capital works program.

Key performance achievements across the current period include:

• delivery of the agreed replacement plan for heavy and light vehicles, with changes to the replacement criteria for trailers coming into effect from 1 January 2018;

• acquisition of new fleet associated with the increased program of works.

• continued deployment of an In-Vehicle Management System (**IVMS**), utilising the Two 10 Degrees (Auspace) 'Lone Worker' technology. The IVMS allows for the transfer of data (including alerts) from a mobile employee, to a central location or other mobile device, with a focus on:

   o employee safety and welfare for mobile employees working alone in remote or risky areas; and

   o measuring and managing driver behaviour and vehicle treatment.

• Introducing new technologies to enhance compliance and fleet data integrity.

8.   2020 - 2025 Fleet Capital Program

The fleet capital expenditure program across the 2020 - 2025 period is forecasted to be $112.93m.

This program is being driven by:

- fleet replacement plan for heavy and light vehicles with the sole change to the replacement criteria for the trailer category from 20 years to 15 years.

Forecast fleet capital expenditure for the 2020 - 2025 period is show in Table 7.

Table 7 – Forecast capital expenditure

Forecast capital expenditure	2020/21	2021/22	2022/23	2023/24	2019/2020	Total
Vehicle replacement expenditure	16.76	21.87	24.77	27.86	21.67	**112.93**
Total	**16.76**	**21.87**	**24.77**	**27.86**	**21.67**	**112.93**

Our approach to development of each component of the fleet annual expenditure program for the next five years is outlined in Figure 6 and described below.

Figure 6 – Development of the fleet capital expenditure program
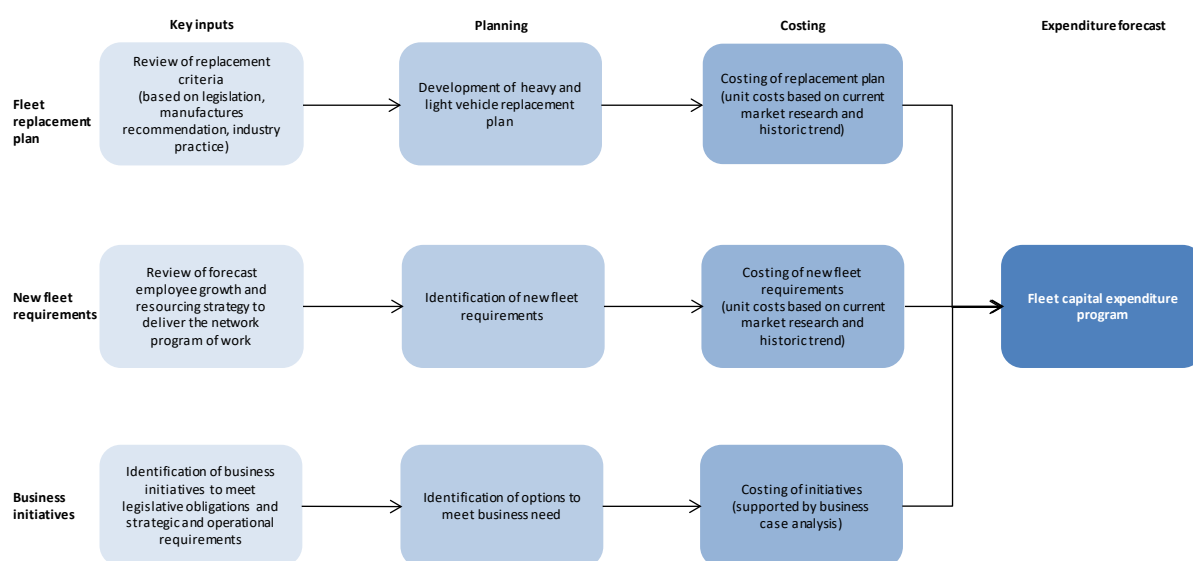
Fleet replacement plan

Development of the fleet replacement plan for the 2020 – 2025 period involved:

- A review of the current replacement criteria to consider whether any changes were required in order to maximise the performance of our fleet. The review identified a need to change the replacement criteria for trailers from 20 years to 15 years. The proposed change was implemented in 2018 and are driven by:

  - an increasing number of trailers being replaced early due to poor condition and safety concerns and the associated disruption and dissatisfaction that this causes; and

o the need to ensure that our vehicles are fit-for-purpose, compliant to enable the efficient and effective delivery of the network program of work.

Our current and proposed replacement criteria are shown at Table 8.

Table 8 – Fleet replacement criteria

Fleet category	Current replacement criteria	Proposed replacement criteria
EWPs	10 Year Replacement	10 Year Replacement
Cranes	10 Year rebuild with 14 Year Replacement	10 Year rebuild with 14 Year Replacement
Heavy Commercial Vehicles	15 Year Replacement	15 Year Replacement
Trailers	15 Year Replacement (Previously 20 years)	15 Year Replacement
Other Specialist Equipment	20 Year Replacement	20 Year Replacement
TEC Vehicles	3 Year Replacement / 90,000km	3 Year Replacement/ 90,000km
Passenger	5 Year Replacement / 150,000km	5 Year Replacement / 105,000km
Light Commercial Vehicles	5 Year Replacement / 150,000km	5 Year Replacement / 105,000km

- development and costing of the replacement plan for heavy and light vehicles. Replacement unit costs were developed based on a combination of current procurement arrangements, market research and historic trend.

New fleet requirements
No additional vehicles have been forecasted for the 2020 – 2025 period.

Business initiatives
A business initiative involving the use of our IVMS for the management of fatigue is being prepared as part of the ICTI submission.

9.   Fleet Management Structure, Roles and Functions

9.1   Fleet Management

As process owner for Fleet in SAPN, the Fleet Management group is responsible for the effective management of our entire fleet of vehicles and associated plant and equipment. Fleet Management is structured into three key business units – Business Management, Acquisition Management and Fleet Standards and Compliance.

Business Management

Business Management is primarily responsible for the 'Plan' and 'Manage' stages of the fleet lifecycle with responsibility of some functions across the Build and Run stages. Key functions include:

- fleet strategy and planning;
- budget preparation and management;
- business analysis, monitoring and performance reporting;
- fleet administration, including tyre, infringement, safety and accident management;
- TEC (executive vehicles) vehicle acquisition and management;
- fleet inspections including Heavy Vehicle Compliance;
- vehicle disposal management;
- hire vehicle, pool vehicle and novated lease management;
- management of external fleet management services contract management (refer below); and
- servicing, maintenance and repair management.

Fleet Management have a need to supplement its internally sourced management of data by the utilisation of a third-party fleet management service provider.

The scope of these services includes the following fleet management support services:

- online access and update functionality to the Fleet Management System;
- online reporting, on request reporting, quarterly performance reporting;
- vehicle registration management;
- payment facilitation services;
- provision of access to the 3rd party fleet management discount offerings through selected suppliers;
- Account Manager, operational support and other back-office support personnel;
- maintenance and repairs call desk access and support services;
- road side assistance;
- employee benefits;
- fuel management services; and
- vehicle leasing services.
- accident management

Fleet Acquisition Management

Fleet Acquisition Management is primarily responsible for the 'Build' stage of the fleet lifecycle. Key functions include:

- vehicle acquisition;

- vehicle standards and specification development and approval;

- vehicle build management and commissioning; and

- vehicle delivery management.

Fleet Standards and Compliance Management

Fleet Standards and Compliance Management responsibility is primarily spread across the the 'Build' and 'Run' stage of the fleet lifecycle. Key functions include:

- Fleet legislative and business compliance;

- Fleet standards interpretation and application;

- Fleet Asset Inspection Management;

- Fleet Inspection, servicing, maintenance and repair strategy

- Fleet Inspection, servicing, maintenance and repair contract management

9.2 Servicing and Maintenance Management

Fleet Management is primarily responsible for the "Run" stage of the fleet life cycle, utilising the Fleet Operations group for the "doing" component of the "Run" stage of the fleet life cycle. Fleet Management develops in consultation with the Fleet Operations group an annual Fleet Operating Works Plan.

Fleet Operations group executes the plan on behalf of Fleet Management and reports regularly on progress.

The key maintenance functions to be delivered by Fleet Operations group include all internal and external vehicle servicing and maintenance. Incorporating the following activities:

- maintenance, servicing and repairs of all Fleet related equipment;

- post legislative inspections maintenance and repairs (EWP's and cranes);

- major brake overhauls on commercial vehicles;

- rope replacements on cranes;

- boom cleaning on EWP's;

- major inspections (NDT rebuilds) on EWP's and Cranes;

- project works; and

- management reporting.

Figure 7 below illustrates the current organisational structure across the Fleet Management and Fleet Operations groups.

Figure 7 – Fleet Management and Operations structure
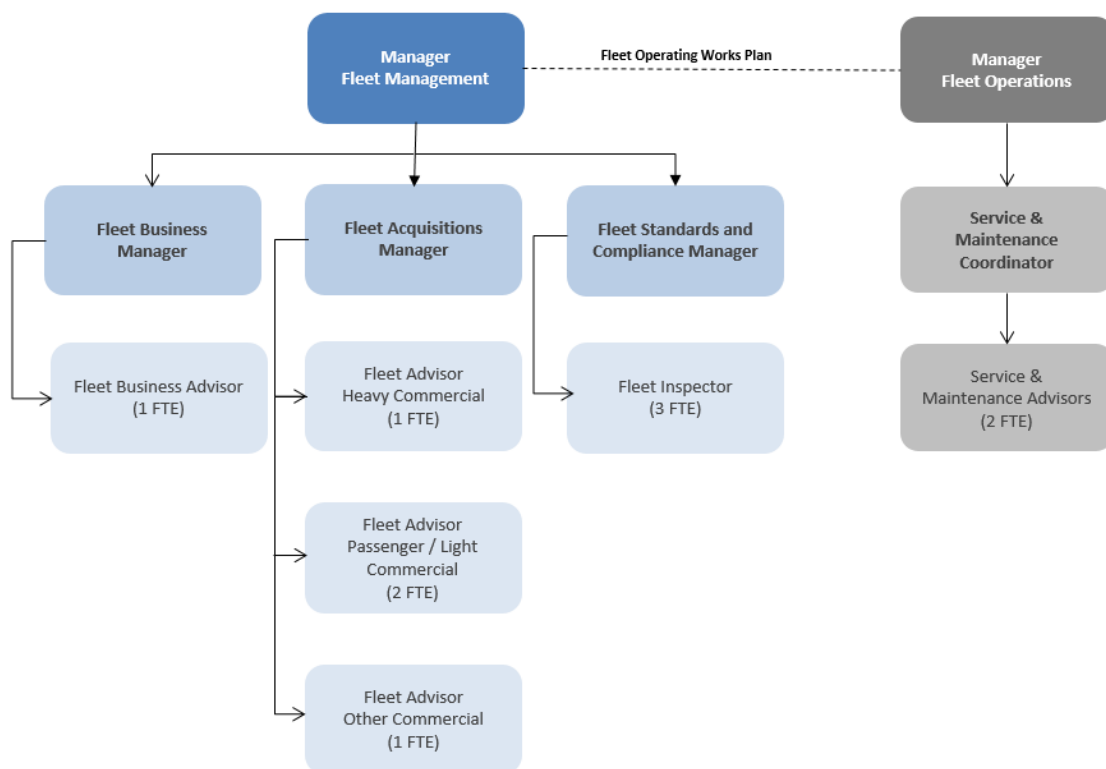
Appendix 1: Vehicle Replacement Comparison

Table 9 – Comparison of vehicle replacement criteria with other DNSPs as known to SAPN, as at 30 June 2018

	SA Power Networks	PowerCor (under review)	AusGrid	Essential	Ergon	Energex
EWP	10 year	15 year	10 year	10 year	10 year	10 year
Crane	14 year	10 yrs/300,000Kms-Cab 20 yrs Crane	10 year	10 year	10 year	10 year
Borer's and Wire Winders	20 year	10 yrs/300,000Kms-Cab 20 yrs Borer	10 year	10 year	10 year	10 year
Commercial Trucks	15 year	15 year/300Kms	15 year	10 to 15 year	10 to 15 year	10 to 15 year
Misc. Equipment	20 year	10 year	15 year	15 year	15 year	15 year
Trailers	15 year	15 year	15 year	15 year	15 year	15 year
Passenger	5 year/150,000Kms	4 year/120,000Kms	5 year/120,000Kms	5 year/100,000Kms	4 year/100,000Kms	4 year/100,000Kms
Light Commercial 4x2	5 year/150,000Kms	6 year/150,000Kms	6 year/150,000Kms	5 year/120,000Kms	7 year/140,000Kms	7 year/140,000Kms
Light Commercial 4x4	5 year/150,000Kms	6 year/140,000Kms		5 year/120,000Kms	7 year/140,000Kms	7 year/140,000Kms
Light Commercial - Heavy Duty	5 year/150,000Kms	300,000Kms		5 year/120,000Kms	4 year/150,000Kms	5 year/150,000Kms
TEC	3 year/90,000Kms	4 year/100Kms		100,00Kms	3 year	2 year/90,000Kms