Business case: ICT Non-Recurrent - SAP Small Module Lifecycle Management and Optimisation

2025-30 Regulatory Proposal

Supporting document [5.12.14]

January 2024

SA Power Networks

Empowering South Australia

Contents

Glossary

Acronym / term	Definition
ATO	Australian Tax Office
Capex	Capital expenditure
EBA	Enterprise bargaining agreement
ERP	Enterprise resource planning
FTE	Full-time equivalent
ICT	Information and communication technology
NPV	Net present value
Opex	Operating expenditure
RCP	Regulatory Control Period
SaaS	Software as a Service
STP	Single Touch Payroll
T&A	Time and attendance system

1. About this document

1.1 Purpose

This document provides a business case to justify the Non-network Information and communication technology (**ICT**) forecast expenditure for the replacement or upgrades of small SAP modules that are reaching end-of-life in the 2025–30 regulatory control period (**RCP**).

1.2 Expenditure category

- Non-network ICT capital expenditure (**capex**): Non-recurrent – Major replacements or upgrades
- Non-Network ICT operating expenditure (**opex**): Non-recurrent – Base Year Software as a service (**SaaS**) Adjustment

1.3 Related documents

Table 1: Related documents

Title	Author	Version / date
5.12.1 - IT Investment Plan 2025-30 - Asset Plan	SA Power Networks	Jan 2024
IT Asset Management Plan	SA Power Networks	Jan 2024
Digital and Data Strategy	SA Power Networks	Jan 2024

2. Executive summary

SAP is an integrated suite of modules that enable SA Power Networks critical business and customer functionality. Each of these modules has its own lifecycle and is due for replacement or upgrade at different times. During the 2020–25 RCP, we upgraded our core enterprise resource planning (**ERP**) SAP modules to S/4 HANA. During the 2025–30 RCP, a number of the other smaller modules will come to end of life. These include:

- The warehouse management module, which enables our field crew supplies warehouse, inventory and logistics management
- Our SAP mobile applications technology, which enables secure access to all our SAP capabilities from a wide variety of client devices
- Our key system administration modules (and related systems), which allow us to manage various capabilities across the application landscape, including system monitoring, integration, business processes, security compliance, change management and audit, archiving and data volumes, document rendering, and environment provisioning

All these capabilities are essential to SA Power Networks' ability to reliably supply services to customers and maintain network supply.

In addition, our payroll module requires optimisation to continue to cost-effectively meet our mandated Single Touch Payroll (**STP**) compliance obligations. During the 2020–25 RCP, we were required to start to meet our Australian Tax Office (**ATO**)-mandated STP obligations to provide progressively higher levels of payroll detail to both the ATO and our staff, and in near real-time. We were able to meet these obligations as required, but at a significant uplift in manual effort and cost. Meeting the obligations exposed the fact that we have extremely complex payroll conditions and system. We need to simplify these to reduce our effort and cost, as well as the significant opportunity for errors.

This business case recommends continuing our prudent, risk-based approach to replacing legacy modules by transitioning to supported and licensed successors. It also proposes implementing targeted updates to our payroll solution to reduce system complexity and ensure that current capabilities can be maintained over time, with systems optimised to ensure the lowest long-term cost to customers. The total expenditure for this preferred option **is $17.9 million[1], of which $15.1 million is within the 2025–30 RCP.** The 2025–30 RCP forecast includes $12.3 million of non-recurrent capex, $1 million of non-recurrent SaaS related opex (which we will seek as a base year adjustment) and $1.7 million of recurrent opex which will be funded through business efficiencies derived elsewhere in the IT portfolio. The overall residual risk rating is Medium.

Other options considered were:

- **Do nothing (Base case):** This option involves not replacing our end-of-life systems or addressing payroll system and process complexity. Where available, extended support for end-of-life systems will be taken up. In the case of warehouse management, there is no possibility of extension, and not addressing will therefore require reverting to manual processes. Our ability to manage the SAP landscape will be impacted should the tool used for administering this technology fails to work because of it operating unsupported.
- **Replace end-of-life modules and applications only ($14.9 million over 10-year period) (Option 2):** This option would address end-of-life systems and therefore enable maintenance of critical functionality. However, the inefficiencies and increasing potential for errors in our payroll system would not be

[1] Unless otherwise specified, all financial figures in this business case are in real June 2022 dollars.

addressed. This will require ongoing workarounds and increasing cost to ensure we avoid paying our people incorrectly and can continue to meet our STP compliance obligations.

- **Defer all investment until the 2030–35 RCP ($16.2 million over 10-year period) (Option 3):** Under this option we would complete all activities included in the preferred option, however we would be deferring all work until the 2030–35 RCP.

The preferred option was selected because it:

- ensures we are able to maintain current levels of service and deliver customer, network and business service, avoiding the need to revert to more manual processes
- maintains our existing systems and services at the current acceptable levels of risk by ensuring that these systems are secured and vendor supported, reducing the risk of critical business system failure from lack of support or cyber security breaches and/or loss of business and customer data
- leverages the investment we have made in these technologies and the skills and knowledge our workforce has developed in these capabilities
- maintains our ability to pay our people correctly and therefore the morale of our workforce, and safeguards our reputation
- ensures we are able to continue to meet legal obligations associated with STP compliance
- minimises the long-term cost associated with our systems
- shows the best Net Present Value (**NPV**) of all available options over the next two RCPs, with continued benefits post-2030–35 driving the best financial outcome for customers in the long term.

Table 2: Options assessment summary, $million, June 2022[2].

	Total program costs (10 year)			2025–30 costs			Program estimates		Residual risk rating[3]	Ranking
Option	**Capex**	**Opex**	**Total**	**Capex**	**Opex**	**Total**	**Benefits**	**NPV[4]**		
Option 0 – Base case (Do nothing)[5]	-	-	-	-	-	-	-	-	**Extreme**	**4**
Option 1 – Replace end-of-life applications and modules and complete payroll and Time & Attendance (T&A) system optimisation in 2025–30	13.5	4.5[6]	17.9	12.3	2.7[3]	15.1	5.3	-11.5	**Medium**	**1**
Option 2 – Replace end-of-life applications and modules in 2025–30. Do not address Payroll and T&A system optimisation.	10.5	4.5	14.9	9.3	2.7	12.1	-	-12.7	**High**	**2**
Option 3 – Defer all activities to 2030–35	13.5	2.7	16.2	-	-	-	1.5	-11.6	**Extreme**	**3**

[2] Note: Totals presented in tables throughout this document may not exactly match the sums of individual figures due to rounding.
[3] The overall risk level for each option after the proposed option implemented. Refer to Appendix C – risk assessment for details.
[4] NPV of the proposal over 10-year cash flow period from 1 July 2025 to 30 June 2035, based on discount rate of 4.05%.
[5] The costs and NPV of option 0 (base case) have been set to zero as the costs associated with this option have been included as benefits of other options as appropriate.
[6] This figure represents the total spend (ie includes recurrent opex of $1.7 million that will be funded through business efficiencies).

3. Background

SA Power Networks' operation and management of the distribution network is dependent on our SAP solution for managing our assets, our customers, maintenance planning and work execution. This integrated suite of SAP modules, along with other supporting applications, provides capabilities that enable:

- management of all network assets
- work management, including prioritisation and execution of planned and supply restoration work for field crews
- management of warehouse activities, inventory and stock details
- delivery of customer services, including managing the connection and disconnection of customers, along with customer billing
- management of safety of field staff and customers, including life-support and critical customers
- critical bushfire risk management processes
- customer messaging alerts and restoration information
- corporate services, including finance, planning procurement, human resources, payroll, warehouse management, and project delivery
- technology services, including security, mobility, integration and information management.

3.1 The scope of this business case

This business case addresses issues associated with our business-critical SAP capabilities. This includes addressing the risk of modules that have reached end of life by replacing or upgrading these, implementing these changes in the most efficient way possible. It also includes implementing any updates required to ensure that current capabilities are able to be maintained over time, optimising our systems at the lowest long-term cost to customers. The business-critical modules and capabilities required to be addressed in 2025–30 are described below.

Field warehouse management module
SA Power Networks has used our legacy warehouse management module since the original implementation of the ERP system in 1998. This module is critical to business processes, providing inventory management, stock control and re-ordering of parts and materials issued to our field crews. It enables us to efficiently manage the demand, storage, and consumption of materials to support the services we provide to customers, as well as planned and unplanned maintenance of the electricity network. In 2017, we were advised by the solution vendor that the warehouse management module would come to end of life in December 2025, with our ability to use this software ending at that date.

Mobile app technology

SA Power Networks introduced SAP mobile applications to our workforce in 2015, enabling our people – the field workforce in particular – to access systems and information away from the office. The SAP mobile applications allow employees to access a series of mobile-friendly solutions (50+) that have been deployed to access our SAP system. The vendor has advised it will end support for the current SAP mobile applications at the end of 2025.

Landscape management (system administration tools)

The SAP landscape management tools enables a significant number of our core business processes, allowing us to effectively and efficiently perform assets and work management and customer services

management, maintain and monitor the health of our systems that enable our interactions with the market, and ensure compliance monitoring for our market obligations.

A key component of this is SAP Solution Manager, which is a central support and system-management suite of tools. This capability reduces and centralises management of the large number of SAP and non-SAP systems, as well as end-to-end business processes, included within our SAP system landscape. SAP Solution Manager covers the complete application lifecycle of an SAP customer's business processes running on-premises, hybrid or in the cloud. It enables us to maintain and uplift systems monitoring, key integrations and business processes across our core systems, to facilitate efficient business processes that ensure continuity of service.

Other landscape management tools and supporting technologies enable us to:

- maintain effective management of security compliance across the landscape (SAP Access Control)
- maintain effective change management and audit capabilities across the SAP landscape (Re-platform RevTrac)
- manage archiving and data volumes to ensure data growth is managed cost-effectively across the SAP landscape (SAP Content Server)
- maintain ongoing ability to render documents within SAP business process (SAP Adobe Document Services)
- uplift environment provisioning to meet the growing demand from the business and the rate of change implementation.

Payroll and Time and Attendance (T&A) systems

SA Power Networks payroll processes span across several core systems. These processes support management of the workforce, including through efficient time management and accurate, reliable employee services. Key among these is our ability to pay staff, as well as to comply with legal obligations, such as enterprise bargaining agreements (**EBAs**) and STP. Therefore, these systems can influence employee morale and impact organisational brand, and can therefore impact the efficient delivery of work needed to maintain the electricity network and service our customers.

3.2 Our performance to date

SAP is a very large integrated system and we have taken a prudent, cost-effective, risk-based, multi-RCP approach to replacing or upgrading our end-of-life modules. Figure 1, below, illustrates our progress over the current and prior RCPs, and what we forecast for the next period.

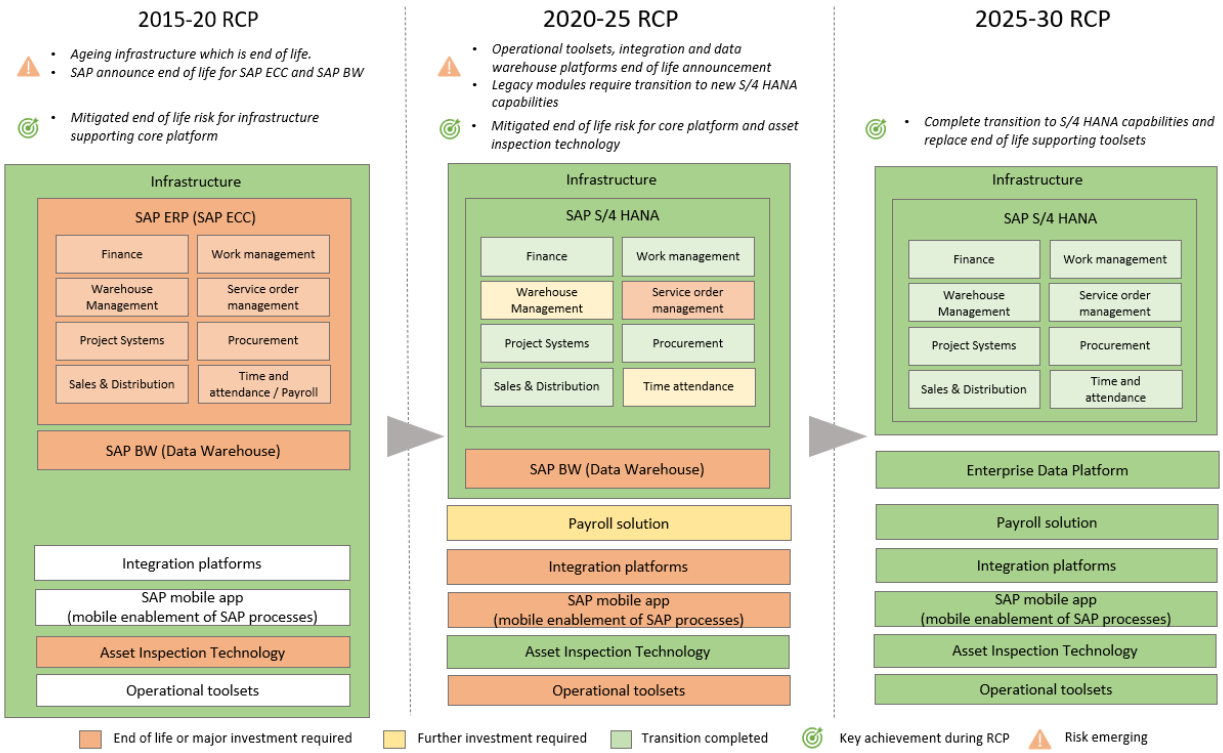


Figure 1: Progress of platform and module replacements across 2015–30

During the 2020–25 RCP, we upgraded the core ERP modules, including finance, project systems and procurement. This was a $28 million program, delivered on time and on budget. This proposed business case is the continuation of a rolling program of refresh activities on our core technology system as end-of-life approaches, relative to each module.

3.3 Drivers for change

End of life

Systems' risk profiles escalate significantly when they reach end of life, due to the vendor's support and patching activities ending. In some cases, end of life results in the business no longer being able to access and use the system.

As well as risk of system failure or unavailability, systems and applications that are not vendor-supported are likely to lead to cyber security vulnerabilities. Not addressing these vulnerabilities could result in a leak of confidential customer information, loss of system access, loss of trust in our IT systems or even loss of electricity network control.

Table 3 lists items reaching end of life, with the date reflecting the end of extended support.

Table 3: SAP end-of-life small modules in 2025–30

Capability	Current module/ application	End of life	End-of-life reason/ impact	Customer impact
Warehouse management	Warehouse Management	December 2025	Vendor shut-off, with immediate loss of access.	High – lack of inventory management of parts and materials could impact resolution times for planned and unplanned outages.
SAP mobile applications technology	Fiori Mobile Client	December 2025	Loss of ability to provide secure and reliable mobile access to SAP business processes.	High – lack of access by field crews to accurate data could increase the length of outages to customers.
Landscape management	SAP Solution Manager	December 2027	Loss of ability to monitor and efficiently manage the SAP landscape.	High – this is a critical system administration tool that monitors our SAP systems. Interactions with the National Electricity Market are monitored by this solution.
	SAP Adobe Document Services	December 2030	Loss of ability to render documents with business process.	Medium – business and field crews could be unable to open pdf documents, resulting in operating instructions, safety checklists etc. not being available.
	SAP Access Control	December 2030	Loss of ability to effectively manage SAP security compliance and ongoing external audit requirements.	Medium – this tool manages user access to systems and data, reducing the risk of customer data being compromised.

System optimisation for lowest long-term cost

In the last five years, SA Power Networks has refreshed both our payroll solution (SAP Employee Central Payroll) and our field time-management system to cloud-based solutions (Click Field Service Edge). While this refresh has mitigated risk in our core time-management process, it has exposed issues associated with our various time and attendance solutions and complex, highly customised solutions and integrations contributing to the end-to-end payroll process. There is also insufficient automated data validation and monitoring across these systems. These factors are driving a significant manual effort – and therefore, cost – to attempt to ensure accuracy of outcomes, and are still resulting in considerable potential for error.

Additionally, the ATO imposed mandatory STP compliance obligations and has announced a commitment to further phases. This, and new EBA requirements, have resulted in complex customisations and processes, driving a high cost to both implement and test these updates. The additional cost is compounded by the requirement for specialised knowledge due to the high level of customisation and technical complexity.

As a result of these drivers, it is prudent to now consider the most efficient long-term solution to accommodate ongoing compliance changes and ensure the reliability and accuracy of our payroll outcomes.

3.4 Industry practice

Standard industry practice to address system end of life is to upgrade the software by either taking on the current vendor's successor product, or to replace it with an alternative technology.

It is also standard business practice to ensure ongoing compliance to regulations and applicable standards, as well as to minimise long-term process cost and maximise the value of investments.

4. The identified need

The driver for investment action being considered in this business case is to address issues associated with our business-critical technology capabilities. This includes addressing non-availability and security risks associated with applications or modules that have reached end-of-life by replacing or upgrading these, as well as implementation of any updates required to ensure that current capabilities can be maintained efficiently over time.

In considering potential responses to this driver, we engaged with our customers on their desired service level outcomes balanced against price outcomes and considered our regulatory requirements under the National Electricity Rules, National Electricity Law and jurisdictional regulations. As a result of these considerations, the identified need for our SAP Lifecycle Management program is:

a. To respond to customers' concerns[7], identified through our consumer and stakeholder engagement process, regarding their explicit service level recommendations that we:
    - maintain reliability service performance – driven by a desire to not see extended outage duration times due to failed or insecure IT applications leading to the inability to deliver critical stock to crews for maintenance work for unplanned outages
    - maintain reliability of our internal systems through monitoring.

b. To continue to comply with applicable regulatory obligations/requirements[8], in this case with specific reference to:
    - legal obligations associated with the ATO STP and our own EBA obligations
    - cyber security obligations and enhanced responsibilities for critical infrastructure providers[9]
    - ensuring compliance with AEMO market rules.

c. To maintain the safety of our distribution network and system, in relation to the risks of harm to workers, consumers and community – through the provision of easy to access and clear information for all customers when they need it, particularly during significant outage events.

d. To drive efficiency in our IT applications – ensuring continuity of essential services for the minimum possible long-term cost.

[7] This is pursuant to Clause 6.5.7(c)(5A) of the NER, which requires regard to be had to the extent to which forecast expenditure seeks to address the concerns of distribution service end users identified by the distributor's engagement process.
[8] This is pursuant to Clause 6.5.7(a)(2) of the NER, which requires expenditure in order to comply with all appliable regulatory obligation s or requirements associated with the provision of standard control services.
[9] CISC Factsheet – The Security Legislation Amendment (Critical Infrastructure Protection) Act 2022.

5. Comparison of options

5.1 The options considered

Table 4: Summary of options considered

Option	Description
Option 0 – Base case (Do nothing)	Modules and applications that have reached end of life will not be replaced or upgraded. Extended support will be taken up for selected applications to push out their end-of-life dates. Past this date, modules will continue to be maintained where this is possible, however this option will not be available for all modules (for example the warehouse management module).
Option 1 – Replace end-of-life applications and modules. Complete Payroll and T&A system optimisation in 2025–30	All modules and applications that have reached end-of-life will be replaced or upgraded to maintain continuity of services. Extended support will be taken up for selected applications to push out their end-of-life dates. Targeted changes will be implemented to our payroll and T&A applications in order to reduce complexity within systems and processes, providing a reliable end-to-end process and reducing the high current costs associated with system maintenance and compliance related upgrades.
Option 2 – Replace end-of-life applications and modules in 2025–30. Do not address Payroll and T&A system optimisation	Similar to Option 1, all modules and applications that have reached end-of-life will be replaced or upgraded to maintain continuity of services. Extended support will be taken up for selected applications to push out their end-of-life dates.
Option 3 – Defer all activities to 2030–35	All activities included within Option 1 will be completed, however these will all be deferred until the 2030–35 RCP. For the 2025–30 RCP, modules and applications that have reached end of life will not be replaced or upgraded. Extended support will be taken up for selected applications to push out their end-of-life dates. Issues associated with the high cost and risk of our Payroll and T&A applications will not be addressed.

5.2 Options investigated but deemed non-credible

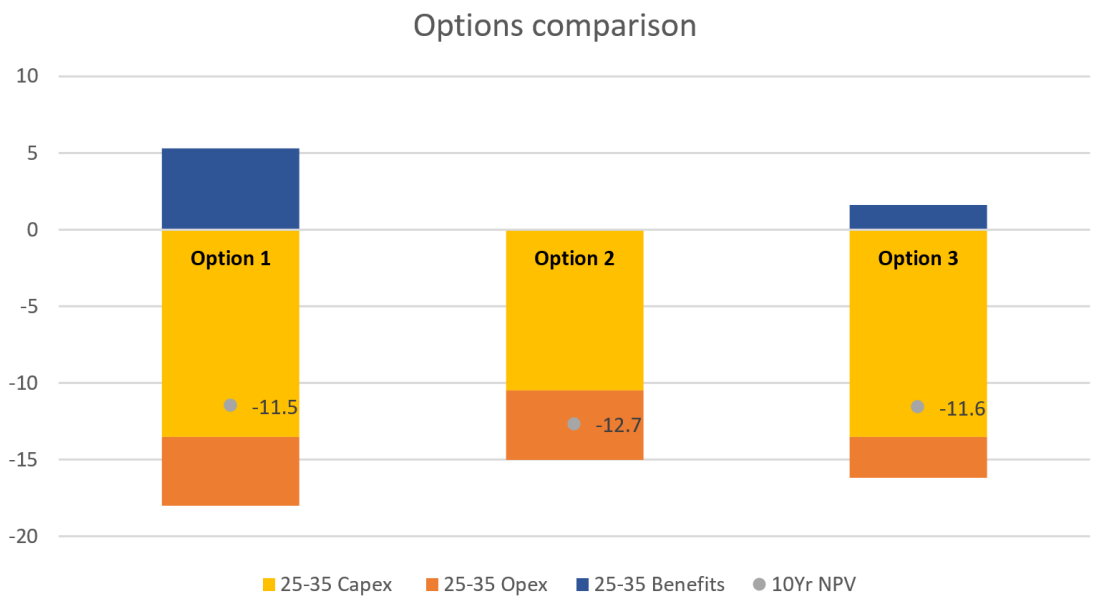
Alternatives for replacing end-of-life modules with non-SAP solutions were considered. However, it was assessed that the cost associated with integrating non-SAP products into our SAP landscape would be significantly higher than the SAP options. In addition, the integration of complex software modules from alternative vendors into our SAP landscape would drive risk that such solutions would be unable to achieve the same level of service outcomes as our proposed options. For this reason, non-SAP solutions have been discounted from this analysis.

5.3 Analysis summary and recommended option

5.3.1 Options assessment results

Table 5: Costs, benefits and risks of alternative options relative to the base case over the 10-year period, $m, $ June 2022 real. The Option 0 (Base case) costs have been included as benefits under other options where appropriate.

Option	10-year program/ project costs			2025–30 program/ project costs			10-year Benefits[10]	10-year NPV[11]	Overall risk rating[12]	Ranking
	Capex	Opex	Total	Capex	Opex	Total				
Option 0 – Base case (Business as usual)[13]	-	-	-	-	-	-	-	-	Extreme	4
Option 1 – Replace end-of-life applications and modules and complete payroll and T&A system optimisation in 2025–30	13.5	4.5	17.9	12.3	2.7	15.1	5.3	-11.5	Medium	1
Option 2 – Replace end-of-life applications and modules in 2025–30. Do not address payroll and T&A system optimisation.	10.5	4.5	14.9	9.3	2.7	12.1	-	-12.7	High	2
Option 3 – Defer all activities to 2030–35	13.5	2.7	16.2	-	-	-	1.5	-11.6	Extreme	3



5.3.2 Recommended option

SA Power Networks recommends Option 1 – Replace end-of-life applications and modules and complete payroll and T&A system optimisation in 2025–30. This option has the lowest risk of the identified alternatives, reducing residual risk from Extreme to Medium as at the end of the RCP. It also has the best NPV of the options, with the benefit from saved and avoided costs associated with the payroll and T&A

[10] Represents the total capital and operating benefits, including any quantified risk reduction/management benefits, over the 5-year cash flow period from 1 July 2025 to 30 June 2030 expected across the organisation as a result of implementing the proposed option.
[11] NPV of the proposal over 10-year cash flow period from 1 July 2025 to 30 June 2035, based on discount rate of 4.05%.
[12] The overall risk level for each option after the proposed option implemented. Refer to Appendix C – risk assessment for details.
[13] The costs and NPV of option 0 (base case) have been set to zero as the costs associated with this option have been included as benefits of other options as appropriate.

optimisation outweighing the costs of delivering this component of the business case and continuing to delivering savings in the long term.

Upgrading or replacing the end-of-life warehouse management solution enables us to maintain access to system functionality to support warehouse stock management activities, avoiding the need for a manual approach to capturing and modifying changes to stock count and associated storage details. With confidence in inventory management, we will continue to be responsive to unplanned outage restoration needs and, importantly, keep outage durations as low as possible so as not to lower our quality of service to customers.

Migrating to the successor SAP mobile applications technology will ensure that we maintain the efficiency and agility of mobilised business processes. It will ensure that both office and operational staff can continue to access our business systems, processes and data while working remotely and away from our premises. Field workers will be able to continue to access critical information while on the job, minimising delays in services delivered to customers.

Upgrading or replacing our end-of-life landscape management modules and applications will allow us to continue to effectively manage our SAP landscape, and continue to utilise tools that support system monitoring, process documentation, document services, landscape management, archiving and data volume management, and access control functionality.

Delivering targeted changes to payroll and T&A systems to reduce the complexity of the system and process will consolidate employee time-entry systems, reducing errors associated with multiple entry points. Maintaining accurate employee time capture and validation will significantly reduce the likelihood that employees are paid incorrectly. Additionally, it drives the lowest long-term cost to customers, with system simplification significantly reducing both future development and maintenance costs, and system updates associated with ongoing STP and EBA requirements.

5.4 Option 0 – Base case (Business as usual)

5.4.1 Description

Under Option 0, none of SA Power Networks' applications that will be reaching end of life within the 2025–30 RCP will be replaced or upgraded. We will continue operations in a business-as-usual manner. This includes purchasing additional support to extend the useful lives of all respective applications, where this is available, and material, then retaining these systems beyond the ending of extended support.

The system and process complexity issues associated with our payroll and T&A systems, and the considerable manual effort to ensure accuracy of outcomes, will not be rectified under Option 0.

5.4.2 Costs

Not addressing our payroll and T&A issues would mean retaining costs associated with the complexity in our current payroll and T&A systems. Future STP and EBA changes would also continue to drive a high level of cost. These costs are included as benefits within each other of the other options as appropriate, when they are saved or avoided under that option. These are described below, with benefits summarised in Table 6:

- **Systems maintenance:** One additional Full-time equivalent (**FTE**) is currently needed to support the systems due to additional complexity. This includes activities such as manual monitoring of payroll and T&A business processes, validating time-entry data to maintain accuracy in payroll, and rectifying systems issues and incidents.

- **Systems ongoing development:** The current complexity requires specialised development resources at premium rates of $2000 per day, compared to $1200 per day for a generic developer.
- **STP compliance updates:** Resource effort for implementing and testing our external STP compliance updates is conservatively estimated at a 20% premium due to system complexity.

Table 6: Option 0 cost elements

Cost type	Description	Cost ($M)
Opex reduction	Systems maintenance: 1 x FTE reduction	$0.20m per annum
Opex reduction	Systems ongoing development: 40% reduction in contract rate	$0.16m per annum
Opex avoidance	STP compliance updates: 20% reduction of effort per project relative to $3M average cost of STP phase1 & STP phase2	$0.6m every 2 years

Note that the costs associated with a failure to replace end-of-life systems have not been quantified.

5.4.3 Risks

Table 7 provides a summary of the risk assessment conducted for the base case option. The full risk assessment is provided in Appendix C.

Table 7: Risk assessment summary

Risk consequence category	Current risk level[14] (Option 0)
Safety – Harm to a worker, contractor or member of the public	Medium
Performance and growth – Non-compliance with regulatory, legislative and/or other obligations	High
Network – Failure to transport electricity from source to load	High
Customers – Failure to deliver on customer expectations	High
Culture and workforce – Misalignment in the beliefs and behaviours of workers, management and customers	High
Technology and data capabilities – Disruption of access to, or use of, systems	Extreme
Technology and data capabilities – Unauthorised access or disclosure of information	Medium
Overall risk level	Extreme

The key risk associated with not addressing our end-of-life systems is that we will be unable to use some of our core ERP systems.

- For warehouse management, the business will no longer have access to this functionality or have the ability to create or update associated data, and therefore would need to revert to a manual approach for managing warehouse activities and stock data. Reversion to manual processes would have an immediate detriment effect to field operational capabilities and therefore services to customers.
- While our mobile applications will continue to operate in the short term, operating unsupported will significantly increase our cyber risk, and over time the application will cease to function.
- Landscape management tools provide monitoring of the modules and integrations across the SAP landscape. Not maintaining these will impact on our ability to efficiently identify and remediate

[14] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).

systems and integrations issues, and our ability to keep our systems highly available, stable and accessible.

As a result, the residual risk associated with not addressing these issues has been rated as Extreme.

The key risk associated with not addressing system optimisation is that data quality issues may lead to incorrectly paying our people, resulting in staff morale and brand damage issues. It could also result in the inability to continue to meet, or accurately report on, STP requirements.

5.4.4 Quantified benefits

The are no quantified benefits associated with this option.

5.4.5 Unquantified benefits

The primary benefit of this option is avoidance of the upfront expenditure associated with both the end-of-life system replacement and payroll and T&A system optimisation activities.

5.5 Option 1 – Replace end-of-life applications and modules and complete payroll and T&A system optimisation in 2025–30 (Preferred)

5.5.1 Description

This option includes upgrading or replacing all modules and applications that are reaching end-of-life within the 2025–30 RCP with the successor SAP services. This includes all modules listed in Section 3.3, that is:

- Warehouse management, replaced with the SAP successor module
- SAP Mobile app technology, replaced with successor SAP mobile client
- Various SAP landscape management systems and modules, including:
  - SAP Solution Manager, replaced with the SAP successor module
  - Various minor applications, re-platformed to supported successor configuration

Extended support will be taken up for all applications where possible to extend their useful life.

As well as replacing obsolete technology, the landscape management program includes taking steps to manage the ongoing impact of data growth across the SAP landscape. This covers implementing additional archiving in line with a data volume management plan and re-architecting existing solutions to support the data growth generated during the inspections of assets within our asset maintenance process.

This option also includes delivering targeted changes to our payroll and T&A applications to reduce the system and process complexity discussed in Section 3.3, making targeted changes and returning functionality to standard where possible. This includes:

- reducing the number of entry points for time data and increasing the level of automated data validations across the process to increase data integrity and increase efficiency through reliable autonomy of integrations supporting business processes
- uplifting the level of business process and integration monitoring between core systems, enabling efficient and reliable processes

- removing complex customisations and reinstating some standard SAP functionality, simplifying support complexity and enabling cost avoidance through simplified delivery of ongoing STP requirements.

5.5.2 Costs

The total forecast for Option 1 is $15.1 million of non-recurrent capex and $2.7 million of opex[15] over the 2025-30 RCP. This includes:

- Warehouse Management: $4.2 million capex
- Mobile app technology: $2.3 million capex and $0.3 million recurrent opex
- Landscape management: $2.8 million capex, $1.0m non-recurrent opex and $1.4 million recurrent opex
- Payroll and T&A system optimisation: $3.0 million capex

Table 8 provides Option 1 estimates of capital and operating costs for the business case. The detailed cost model is listed in Appendix A. Due to criticality of maintaining the warehouse management and the mobile applications functionality, and the short window for completion (out of support at December 2025), activities to migrate to the successor module are commencing during the 2020–25 RCP. The remaining work for replacing this module will be completed at the start of the 2025–30 period.

Table 8: Option 1 – Costs by cost type ($m June 2022 real)

Cost type	2025 H1	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total Project
Capex	1.1	6.6	3.7	1.0	-	1.0	**12.3**	-	-	-	-	-	**13.5**
Non-recurrent Opex [16]	-	1.0	-	-	-	-	**1.0**	-	-	-	-	-	**1.0**
Recurrent Opex	-	0.3	0.3	0.3	0.3	0.3	**1.7**	0.3	0.3	0.3	0.3	0.3	**3.4**
Total	**1.1**	**7.9**	**4.0**	**1.4**	**0.3**	**1.4**	**15.1**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**17.9**

5.5.3 Risks

Table 9 provides a summary of the risk assessment conducted for Option 1. The full risk assessment is provided in Appendix C.

Under this option, the key risk associated with unavailability or insecurity of our end-of-life applications and modules is mitigated, removing the need for a return to manual processes, and reducing the likelihood of consequences from a cyber security breach. As a result, the overall residual risk reduces to Medium. This option also mitigates residual risks associated with payroll accuracy and our ability to meet STP obligations.

[15] Including $1.0 million of non-recurrent opex base year adjustment, and $1.7 million recurrent opex that will be funded through business efficiencies elsewhere in the ICT portfolio.
[16] The request for this opex to be a base year adjustment is provided in Appendix B.

Table 9: Risk assessment summary

Risk consequence category	Current risk level[17] (Option 0)	Residual risk level[18] (Option 1)
Safety – Harm to a worker, contractor or member of the public	Medium	Low
Performance and growth – Non-compliance with regulatory, legislative and/or other obligations	High	Low
Network – Failure to transport electricity from source to load	High	Low High
Customers – Failure to deliver on customer expectations	High	Low High
Culture and workforce – Misalignment in the beliefs and behaviours of workers, management and customers	High	Low
Technology and data capabilities – Disruption of access to, or use of, systems	Extreme	Medium
Technology and data capabilities – Unauthorised access or disclosure of information	Medium	Low
Overall risk level	Extreme	Medium

5.5.4 Quantified benefits

Table 10 provides estimates of quantified benefits for the 10 years starting in July 2025 for Option 1.

Table 10: Option 1 – Benefits by expenditure type ($m June 2022 real)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025 – 30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2030–35
Capex	-	-	-	-	-	**-**	-	-	-	-	-	**-**
Opex	-	-	0.2	1.0	0.4	**1.5**	1.0	0.4	1.0	0.4	1.0	**5.3**
Total	**-**	**-**	**0.2**	**1.0**	**0.4**	**1.5**	**1.0**	**0.4**	**1.0**	**0.4**	**1.0**	**5.3**

The primary quantifiable benefits of Option 1 are removal of the excess payroll and T&A system maintenance, ongoing development and compliance-related enhancement costs, discussed in section 5.4.2, that are currently being incurred. These benefits are profiled in Table 11.

Table 11: Option 1 – Benefits breakdown ($m June 2022 Real)

Benefit type	Benefit description	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Opex reduction	Systems maintenance	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Opex reduction	Systems ongoing development	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Opex avoidance	STP compliance updates	-	-	-	0.6	-	0.6	-	0.6	-	0.6
Total		**-**	**-**	**0.2**	**1.0**	**0.4**	**1.0**	**0.4**	**1.0**	**0.4**	**1.0**

5.5.5 Unquantified benefits

Maintain reliability of our core IT services

- Our ability to maintain optimum levels of warehouse stock is maintained, supporting our ability to manage the impact of supply chain issues. Continued efficient management of stock levels ensures we

[17] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).
[18] The future level of risk once treatments proposed in this option have been implemented.

have sufficient stock for planned maintenance activities and – critically – maintains our responsiveness to restoring supply arising from unplanned customer outages.

- Our ability to support our mobile workforce (including operational staff) accessing our business systems, processes and data while working remotely and away from our premises is maintained, ensuring efficient processes and minimising delays in services delivered to customers.
- We manage security compliance across the SAP landscape, effectively securing critical customer and asset datasets in line with our obligations to our customers and our obligations defined by the Critical Infrastructure legislation.
- We have the ability to effectively and proactively monitor and manage the SAP landscape, ensuring continued reliability and security of the landscape.
- We maintain a robust change management solution, enabling effective change management and audit compliance requirements.
- We maintain reliability of our core systems with the ability to manage a hybrid landscape.
- We have increased capability to manage cloud-based services and integration between core on-premise and cloud-based solutions.
- We maintain the ability to effectively manage security patching and best practice configuration across the landscape.
- We avoid additional cost and maintain system performance through reducing the impact of data growth of the SAP landscape.

Manage cyber security risks

Addressing end-of-life modules will maintain our ability to effectively manage compliance of application configurations and remediations related to security vulnerabilities in accordance with the risk and threats they pose. This will result in a reduced level of system vulnerability and therefore a lower likelihood of security breaches that lead to unauthorised system access and/or loss of sensitive business and customer data. It will also remove the additional costs associated with keeping these applications secure as patching comes to an end.

Cost and reputation damage avoidance

We will be able to maintain our ability to proactively perform maintenance and efficiently restore supply, to minimise the impact to our customers and ensure that we maintain service level agreements (SLA) for managing asset maintenance and work scheduling activities.

Maintain safety of customers and employees

We will be able to maintain the ability for field staff to access critical customer and hazard risks associated with properties. This enables maintenance work to be completed with minimal disruptions to our critical customers, such as those on life support, and prioritises employee safety via the availability of hazard information related to the property being attended.

Maintaining ongoing compliance to market and industry

This option will ensure we maintain compliance to our obligations as a National Market participant and employer. Maintaining system currency supports our ability to conduct business activity, capture and manage our data, and periodically report customer and payroll data to relevant stakeholders to demonstrate our compliance.

Keeping our system costs down

It will enable greater adoption of standard capabilities through standardised core payroll and T&A systems.

5.6 Option 2 – Replace end-of-life applications and modules in 2025–30. Do not address payroll and T&A system optimisation

5.6.1 Description

As with Option 1, this option includes upgrading or replacing all modules and applications that reach end-of-life within the 2025–30 RCP with the successor SAP services. This includes all modules listed in section 3.3, that is:

- Warehouse management, replaced with SAP successor module
- SAP Mobile app technology, replaced with successor SAP mobile client
- SAP Solution Manager, replaced with SAP successor product
- Various applications, re-platformed to supported successor configuration

Extended support will be taken up for all applications, where possible, to extend their useful life.

This option does not include completing changes to our payroll and T&A applications to reduce the system and process complexity discussed in Section 3.3.

5.6.2 Costs

The total forecast for Option 2 is $9.3 million of non-recurrent capex and $2.7 million of opex[19] over the 2025-30 RCP. This includes:

- Warehouse management: $4.2 million capex
- Mobile app technology: $2.3 million capex and $0.3 million recurrent opex
- Landscape management: $2.8 million capex, $1.0 million non-recurrent opex and $1.4 million recurrent opex

Table 12 provides Option 2 estimates of capital and operating costs for the business case. The detailed cost model is listed in Appendix A. As with Option 2, activities to migrate to the warehouse management successor module would commence during the 2020–25 RCP, with the remaining work completed at the start of the 2025–30 period.

Table 12: Option 2 – Costs by cost type ($m June 2022 real)

Cost type	2025 H1	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total project
Capex	1.1	7.7	1.1	0.5	-	0.1	**9.3**	-	-	-	-	-	**10.5**
Non-recurrent Opex	-	-	-	-	-	1.0	**1.0**	-	-	-	-	-	**1.0**
Recurrent Opex	-	0.3	0.3	0.3	0.3	0.3	**1.7**	0.3	0.3	0.3	0.3	0.3	**3.4**
Total	**1.1**	**8.1**	**1.4**	**0.8**	**0.3**	**1.4**	**12.1**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**14.9**

[19] Including $1.0 million of non-recurrent opex base year adjustment, and $1.7 million recurrent opex that will be funded through business efficiencies elsewhere in the ICT portfolio.

5.6.3 Risks

Table 13 provides a summary of the risk assessment conducted for Option 2. The full risk assessment is provided in Appendix C.

Table 13: Risk assessment summary

Risk consequence category	Current risk level[20] (Option 0)	Residual risk level[21] (Option 2)
Safety – Harm to a worker, contractor or member of the public	Medium	Low
Performance and growth – Non-compliance with regulatory, legislative and/or other obligations	High	High
Network – Failure to transport electricity from source to load	High	Low High
Customers – Failure to deliver on customer expectations	High	Low High
Culture and workforce – Misalignment in the beliefs and behaviours of workers, management and customers	High	High
Technology and data capabilities – Disruption of access to, or use of, systems	Extreme	Medium
Technology and data capabilities – Unauthorised access or disclosure of information	Medium	Low
Overall risk level	Extreme	High

Not addressing the remediation of payroll and T&A data quality issues will leave us exposed to the risks relating to payroll accuracy, resulting in staff morale and brand damage issues. It could also result in the inability to continue to meet, or accurately report on, STP requirements.

5.6.4 Quantified benefits

There are no quantifiable benefits associated with option 2.

5.6.5 Unquantified benefits

Option 2 includes all benefits of addressing end-of-life systems discussed for Option 1 in Section 5.5.5. However, it does not address the standardisation and reduction in complexity of our payroll and T&A solution. In particular, it does not result in any benefits associated with:

- ensuring compliance with our STP and EBA payroll obligations, including avoiding damage to employee morale and organisational brand by ensuring our people are paid accurately
- cost-effective maintenance of our payroll and T&A systems, including delivering STP compliance and EBA requirement changes.

[20] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).
[21] The future level of risk once treatments proposed in this option have been implemented.

5.7 Option 3 – Defer all activities to 2030–35

5.7.1 Description

Option 3 is similar to options 1 and 2 in scope. However, this option defers all activities into the 2030–35 RCP. As a result, end-of-life system replacements are not addressed by the vendor's end-of-extended-support date. These systems will be unpatched and will be supported by SA Power Networks as we are best able. The complexity and additional costs associated with our payroll and T&A applications is also not addressed until the 2030–35 RCP.

5.7.2 Costs

The total forecast for Option 3 is $13.5 million of non-recurrent capex and $2.7 million of opex[22] (all in the 2030-35 RCP). This includes:

- Warehouse management: $5.3 million capex
- SAP Mobile applications technology: $2.3 million capex and $0.3 million of recurrent opex
- Landscape management: $2.8 million capex, $1.0 million non-recurrent opex and $1.4 million recurrent opex
- Payroll and T&A system optimisation: $3.0 million capex

Table 14 provides Option 3 estimates of capital and operating costs for the business case. The detailed cost model is listed in Appendix A. As with the other options, activities to migrate to the warehouse management successor module would commence during the 2020–25 RCP, with the remaining work completed at the start of the 2025–30 period.

Table 14: Option 3 – Costs by cost type ($m June 2022 real)

Cost type	2025 H1	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2030–35
Capex	-	-	-	-	-	-	**-**	8.4	4.0	1.0	-	-	**13.5**
Non-recurrent Opex	-	-	-	-	-	-	**-**	1.0	0.0	0.0	0.0	0.0	**1.3**
Recurrent Opex	-	-	-	-	-	-	**-**	0.3	0.3	0.3	0.3	0.3	**1.4**
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9.8**	**4.4**	**1.4**	**0.3**	**0.3**	**16.2**

5.7.3 Risks

Table 15 provides a summary of the risk assessment conducted for Option 3. The full risk assessment is provided in Appendix C.

[22] Including $1.0 million of non-recurrent opex base year adjustment, and $1.7 million recurrent opex that will be funded through business efficiencies elsewhere in the ICT portfolio.

Table 15: Risk assessment summary

Risk consequence category	Current risk level[23] (Option 0)	Residual risk level[24] (Option 3)
Safety – Harm to a worker, contractor or member of the public	Medium	Medium
Performance and growth – Non-compliance with regulatory, legislative and/or other obligations	High	Medium Medium
Network – Failure to transport electricity from source to load	High	High High
Customers – Failure to deliver on payroll expectations	High	High High
Culture and workforce – Misalignment in the beliefs and behaviours of workers, management and customers	High	Medium Medium
Technology and data capabilities – Disruption of access to, or use of, systems	Extreme	Extreme
Technology and data capabilities – Unauthorised access or disclosure of information	Medium	Medium
Overall risk level	Extreme	Extreme

Deferring replacement of our end-of-life systems until the 2030–35 RCP will result in us being unable to use some of our core ERP systems, including our SAP Warehouse Management module. Similar to Option 0, this will require reversion to manual processes until the replacement system is delivered. This would cripple the delivery of many core IT services, with an immediate flow-on to operational capabilities, and therefore services to customers. Furthermore, landscape management tools such as Solution Manager provide monitoring of the modules and integrations across the SAP landscape. Not maintaining this will impact our ability to efficiently identify and remediate systems and integrations issues, and our ability to keep our systems highly available and accessible. As a result, the residual risk associated with not addressing these issues has been rated as Extreme.

Not addressing system optimisation will result in the continued issues with data quality that have been discussed and in ongoing potential for incorrectly paying our people. It could also result in the inability to continue to meet, or accurately report on, STP requirements.

5.7.4 Quantified benefits

Table 16 provides estimates of quantified benefits for the 10 years starting in July 2025 for Option 3. The benefits would not begin to accrue until the programs are delivered in the 2030–35 RCP.

Table 16: Option 3 – Benefits by expenditure type ($m June 2022 real)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025 – 30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2030–35
Capex	-	-	-	-	-	-	-	-	-	-	-	-
Opex	-	-	-	-	-	-	-	-	0.2	1.0	0.4	**1.50**
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.2**	**1.0**	**0.4**	**1.50**

The primary quantifiable benefits of Option 3 are removal of the excess payroll and T&A system maintenance, and ongoing development and compliance update costs, discussed in Section 5.4.2, that are currently being incurred. These benefits are profiled in Table 17.

[23] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).
[24] The future level of risk once treatments proposed in this option have been implemented.

Table 17: Option 3 – Benefits breakdown ($m June 2022 real)

Benefit type	Benefit description	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Opex reduction	Systems maintenance	-	-	-	-	-	-	-	0.1	0.2	0.2
	Systems ongoing development	-	-	-	-	-	-	-	0.1	0.2	0.2
Opex avoidance	STP compliance updates	-	-	-	-	-	-	-	-	0.6	-
Total		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.2**	**1.0**	**0.4**

5.7.5 Unquantified benefits

The unquantified benefits of Option 3 are the same as Option 1. However, these benefits would not begin to accrue until delivery of the respective capabilities during the 2030–35 RCP.

6. Deliverability of recommended option

SA Power Networks has successfully completed other similar projects in the past and there are no anticipated barriers to deliverability of this business case. Work is being delivered internally through a combination of internal resources and contractors, and has been timed to be considered in the context of other deliverables in the 2025–30 period.

7. How the recommended option aligns with our engagement

Customers expect that we will maintain our existing levels of service and risk, and there is also an expectation that we manage our assets prudently and cost-effectively. The recommended investment ensures our applications are fit for purpose to enable us to continue to deliver a reliable, resilient and safe electricity network and access to information and services for our customers.

This project was mentioned in the IT Focused Conversation with the Consumer Advisory Board in September 2022 as ‘for information’. The total costs and bill impacts were included in all other customer engagement conversations as part of Scenario 2 – Maintain but not specifically drawn out in these conversations.

8. Alignment with our vision and strategy

SA Power Networks Digital and Data Strategy outlines the long-term strategic direction for ICT. The focus of the strategy is on the provision of efficient and reliable core systems, and a range of digitisation that ensures our workforce has appropriate skills for the technology implemented. A high-level view of our Digital and Data Strategy is depicted in Figure 2.

The strategy describes core components of the '*Efficient and reliable core IT systems*' enabler that includes:

- keeping core systems and applications operational, current and maintained to an acceptable level of risk
- systems and data remain secure via regular patching and updates
- continued application modernisation to enable movement to more scalable systems and to decrease the risk profile of our legacy environment.

Figure 2: SA Power Networks Digital & Data Strategy

9. Reasonableness of cost and benefit estimates

SA Power Networks engaged Capgemini, a third-party with significant experience in upgrading these applications at end of life. They assessed our technology landscape and provided an initial estimation of costs for a portion of these replacements, based on application and integration complexities, resourcing requirements, and market rates for resources. These were:

- Warehouse Management
- Mobile Applications
- Landscape Management

SA Power Networks then conducted an internal review of the estimations with members of our portfolio and program delivery team to refine the estimations using our own experience and history with these same applications.

As such, we believe the estimates of costs and benefits in this business case are reasonable.

10. Reasonableness of input assumptions

The expenditure forecast in this business case is based on bottom-up effort estimates costed for planning, developing, testing and deploying the SAP modules being replaced and other system work being completed. All labour costs have been calculated using our standard internal and external labour rates, aligned with industry standards and consistent with other NSPs in the sector. The cases are assessed top-down for opportunities to share costs and resources and execute as a program, and the overall costs reduced appropriately.

The labour effort required for delivering the work in this business case was informed by the estimation prepared by our expert third party, discussed above. This has been validated and challenged, bottom-up and top-down, by internal business subject-matter experts using knowledge gained from delivering other SAP modules in recent years.

A. Appendix A – Cost models

SAP Lifecycle estimate - Option 1 Preferred (Replace EOL and complete payroll)

SAP Lifecycle estimate – Option 2 (Replace EOL only)

SAP Lifecycle estimate – Option 3 (Defer to 30–35)

B. Appendix B – Opex base year adjustment (Preferred Option)

Table 18: Opex Base Year Adjustment ($m June 2022) [25]

Category	Application function	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30
Base Year Adjustment[26]	Replacement of SAP Solution Manager with the SAP replacement module.	1.0	-	-	-	-	1.0
	Total opex base year adjustment	**1.0**	**-**	**-**	**-**	**-**	**1.0**

Request

Topic	Detail
Background	During the 2025–30 period we will replace SAP Solution Manager with the SAP replacement module to provide an equivalent service. The replacement solution will be SAAS based.
Request	An opex base year adjustment of $1.0 million[27].

[25] Note: Totals presented in tables throughout this document may not exactly match the sums of individual figures due to rounding.
[26] Note that these figures exclude the recurrent opex of $1.7 million that will be funded through business efficiencies.

C. Appendix C – Risk assessment

				Current risk (Option 0 and 3)			Residual risk (Option 1)			Residual risk (Option 2)		
ID	**Risk scenario**	**Consequence description**	**Consequence category**	**Consequence**	**Likelihood**	**Risk level**	**Consequence**	**Likelihood**	**Risk level**	**Consequence**	**Likelihood**	**Risk level**
1	The inability to access system functionality and data due to modules being end of life.	With loss of warehouse management capability, manual processes to record warehouse stock information will need to be implemented, significantly slowing down materials management for maintenance activities. This would have knock-on impacts on receiving and stocking materials, planning and completing stock replenishment for individual work, the accurate and timely reporting of payment to vendors, and other financial impacts. Errors arising from the manual nature of these activities will exacerbate this issue. The delay to maintenance activities will increase restoration times for outages, impacting customers, our reputation and the risk of penalties. Core systems that allow SA Power Networks to deliver efficient services to customers and manage work on the electricity network will be more prone to systems outages and system issues as a result of a decrease in proactive monitoring and management of the landscape.	**Technology and data capabilities** – Disruption of access to, or use of systems	4	5	**Extreme (9)**	4	2	**Medium (6)**	4	2	**Medium (6)**
			Customers – Failure to deliver on customer expectations	3	5	**High (8)**	3	2	**Low (5)**	3	2	**Low (5)**
			Network – Failure to transport from source to load	3	5	**High (8)**	3	2	**Low (5)**	3	2	**Low (5)**
			Governance – Non-compliance with regulatory obligations	3	5	**High (8)**	3	2	**Low (5)**	3	3	**Low (5)**
			Customer and workforce – Misalignment in the beliefs and behaviours of workers,	3	5	**High (8)**	3	2	**Low (5)**	3	3	**Low (5)**

		Without an effective change management solution for the SAP landscape, the frequency of change will need to be slowed to allow the manual activity required to ensure compliance with auditing obligations and to manage implication to the SAP landscape.	management and customers									
2	Cyber security event leads to unauthorised access to, or corruption of, data of unsupported application.	Mobile applications currently provide information regarding critical customers related to work, and hazard information related to properties being attended. Failure of the mobile app technology as result of a cyber event could result in field workers being unable to access critical information while on the job. As a result, this may cause delays to field work. In the instance where critical data that relates to property hazards or a life-support customer is corrupt or not accessible, the safety of our staff and customers may be at risk. Where data that personally identifies customers is accessed without authority and/or this data is distributed illegally, SA Power Networks may be liable for penalties relating to breaches of the Privacy Act, with consequential damage to our reputation. SAP Solution Manager is used to monitoring security patch compliance and ongoing compliance to security configuration across the landscape.	**Technology and data capabilities** – Disruption of access to, or use of, systems	3	3	Medium (6)	3	2	Low (5)	3	2	Low (5)
			Safety – Harm to a worker, contractor or member of the public	3	3	Medium (6)	3	2	Low (5)	3	2	Low (5)
			Technology and data capabilities – Unauthorised access or disclosure of information	3	3	Medium (6)	3	2	Low (5)	3	2	Low (5)
			Performance and growth – Non-compliance with regulatory obligations	3	3	Medium (6)	3	2	Low (5)	3	2	Low (5)
			Customers – Failure to deliver on customer expectations	2	3	Low (5)	2	2	Low (4)	2	2	Low (4)
3	Payroll and T&A system complexities and	Data quality issues may lead to incorrectly paying our people, which may lead to employee morale and brand damage.	**Customer and workforce** Misalignment in the beliefs and	3	3	Medium (6)	3	2	Low (5)	3	4	High (7)

integration issues lead to missed data quality issue.	This could also lead to reporting incorrectly, or the inability to report, resulting in non-compliance with STP requirements.	behaviours of workers, management and customers									
		Performance and growth – Non-compliance with regulatory obligations	3	3	Medium (6)	3	2	Low (5)	3	4	High (7)
		Overall risk level[28]			Extreme			Medium			High

[28] For each option, the overall risk level is the highest of the individual risk levels.