

Attachment 9.4

# IT Investment Plan

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January 2025

PUBLIC



Dampier Bunbury  
Pipeline

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## Executive summary

We own and operate the Dampier to Bunbury Natural Gas Pipeline (DBNGP), which is Western Australia's most critical piece of domestic energy infrastructure and the backbone of the state's economy. The DBNGP transports large volumes of gas from the domestic gas producing plants on the Northwest Shelf and Pilbara Coast to demand centres in the Pilbara, Perth and Southwest.

Our information and technology systems (DBP IT) are integral to delivering safe, reliable and efficient services. As guardians of critical infrastructure which provide essential services to Australians, we must invest in information technology (IT) that allows us to manage and monitor our assets, meet our obligations and provide consistent and responsive customer service.

This plan outlines the key IT investments proposed for the sixth access arrangement (AA6) period (January 2026 to December 2030). The plan covers corporate IT such as enterprise applications, IT hardware, cyber security, corporate data and managed infrastructure.

Our IT systems provide the following functionality:

- managing market transactions;
- issuing and controlling field work;
- monitoring and recording gas deliveries to customer sites;
- providing a secure environment through cyber controls and security;
- facilitating emergency response services;
- monitoring pipeline condition;
- analysing pipeline capacity;
- recording the configuration and location of assets;
- providing information to our customers and the community; and
- interacting with our customers.

Combined, these functions allow us to provide a safe, reliable and affordable gas supply to our customers.

Like many utilities globally, we are responding to the challenges brought about by climate change and the need to reduce carbon emissions, changes in customer preferences, new technology, rising cyber threats, energy efficiency and the price competitiveness of energy resources.

In 2017, DBP, Australian Gas Networks and Multinet Gas Networks came together to form Australian Gas Infrastructure Group (AGIG). AGIG operates across multiple Australian jurisdictions, bringing together a wealth of expertise and experience that allows its various businesses to share knowledge, information and resources for the benefit of customers.

AGIG's scale and breadth of resources presents opportunity to deliver benefits for DBP's customers in Western Australia. Not least, it allows us to review and rationalise our IT systems and infrastructure across the group, moving to shared platforms where practicable. We are well down the path on the IT rationalisation journey. During the fifth AA period (AA5) (January 2021 to December 2025) we have completed a data centre consolidation, rationalisation of our IT managed service providers, Phase 1 of our OneERP program and uplift of our cyber security capabilities. These were all key foundations of our AGIG IT Strategy, launched in 2019.

The 'OneERP' initiative is achieving an aligned finance and procurement environment across AGIG, which provides supporting tools and standardised processes in line with good industry practice.

Another key initiative in AA5, is the replacement of our Transmission Billing System. This project will replace our outdated and unstable Customer Reporting System with a modernised billing system which will be cloud hosted, stable, secure and offer value to our customers throughout the AA6 period. This project is due to be implemented in Q4 2025 / Q1 2026.

The aim is to develop a stable and aligned IT environment over time which will leverage economies of scale across all our entities. Further we will enhance collaboration with customers and across the business, improve utilisation of data and reporting, and appropriately manage cyber risks.

By the end of AA5, we will have invested \$50<sup>1</sup> million in capital expenditure on our IT systems, including:

- implementation of collaboration tools;
- emergency facilitation of home IT services during the COVID-19 Pandemic, and ongoing remote working options;
- updates to our critical applications;
- replacement of end-of-life end user compute and network infrastructure;
- phase 1 of our “OneERP” project;
- replacement of our customer reporting system; a new online learning and development platform;
- replacement of the engineering document management system;
- migration to cloud and optimisation of the GIS platform;
- enhanced people and culture capabilities in a new human capital management system; and
- cyber security capability improvements.

The higher than forecast investment in AA5 is due to increased risks identified with current systems (e.g. Customer Reporting System, some data centre equipment), higher complexity and less favourable market conditions than forecast with the OneERP project and changing business needs that were not forecast in 2019 (e.g. system and hardware enhancements to support remote working and Human Capital Management system replacement).

In AA6, we propose to invest \$43 million in our IT systems. This is \$7 million lower than the \$50 million we forecast to spend in AA5.

We will invest \$29 million over the period to maintain current levels of service by performing major and minor upgrades of our existing IT systems, maintaining cyber security currency and refreshing end-of-life IT devices and infrastructure.

We are also proposing to invest \$14 million to enhance effective and efficient delivery of IT services by making enhancements to our existing systems based on assessment of business need, uplifting our cyber capabilities further to address identified risks and gaps and developing a field connectivity framework to utilise mobility functions available across our existing suite of applications.

The following table shows the split of recurrent and non-recurrent IT investment forecast for AA6, compared with the total investment expected to be undertaken by the end of AA5 (January 2021 to December 2025).

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<sup>1</sup> Unless otherwise stated, all costs in this document are expressed in December 2024 dollars and excludes overheads and real cost escalation.

Proposed IT investment \$'000 December 2024

IT program of work	2026	2027	2028	2029	2030	Total AA6	Total AA5
Maintain current levels of IT services (recurrent)	8,136	5,687	3,615	7,621	4,325	<b>29,385</b>	<b>47,680</b>
Efficient and effective service delivery (non-recurrent)	4,223	2,886	2,464	2,240	1,762	<b>13,575</b>	<b>2,679</b>
<b>Total</b>	<b>12,359</b>	<b>8,573</b>	<b>6,079</b>	<b>9,861</b>	<b>6,087</b>	<b>42,959</b>	<b>50,359</b>

Tables may not sum due to rounding

The IT investments in this plan are designed to maintain the existing IT environment and services, ensure we remain safe and secure from cyber threats, and make incremental improvements to the efficiency of our operations and service experience of our customers.

We will take a risk-based approach to renewing our critical applications and IT infrastructure in line with vendor/manufacturer guidance and good industry practice. We will take opportunities to improve our operations by implementing system enhancements and further standardise our systems across AGIG where it is practical and cost-effective to do so for DBP.

The investment proposed in this plan will build on the foundations we have built in AA5 – where the focus has been to move from an ad-hoc, reactive approach to maintaining our IT assets to a more proactive approach better aligned with good industry practice. In AA5 we have been playing catch up to achieve currency and reduce the risk profile across our IT application and infrastructure landscape. For AA6, we will be implementing a risk-based proactive approach to maintaining our IT assets that will enable and support the technology future. A summary of key initiatives that are planned for AA6 include:

- Sustaining the applications implemented in past regulatory periods, including OneERP, Maximo, GIS, BYDA and other critical DBP business applications
- Continue cyber security uplift with a focus on data security and in line with government, market and public expectations for protection of critical infrastructure systems
- Sustain the IT data centre infrastructure technology and systems to support the DBP business along with catering for the specific computing needs of 430 personnel.
- Completing the implementation of key business systems that have commenced in the current regulatory period, such as the new Transmission Billing System
- Extending the functionality of existing systems, for example, Data and Analytics / Information Management that has been implemented across AGIG and enabling greater mobility for employees using the capabilities of existing systems
- Making strategic investments in technology so that continuously improve how our teams deliver outcomes for our customers.
- Making use of cloud services where it offers a strategic or total expenditure benefit, e.g., replacing physical infrastructure and installed applications with infrastructure as a service or software / platform as a service

These outcomes align with our vision objectives to deliver quality services that our customers value, to be recognised as a good employer and to remain sustainably cost efficient. More significantly, our proposed investments are informed by and are aligned with what our customers have told us.

The end-to-end program of work was developed and will be delivered using a formal governance framework consistent with the industry standard business and technology project management methodology. The overall program of work is like that undertaken over AA5 and has been staggered to balance the resource profile and allow for the most efficient and successful delivery.

This IT Investment Plan sets out the context for our IT investment (Section 1), our plan for AA6 (Section 2) and consistency with the National Gas Rules (Section 3).

# 1 Context

In the past we have managed our Corporate IT and various Operational Technology (OT) environments separately, only engaging where there are joint requirements or interdependencies. Focus has historically been on OT, with resourcing and budget constraints restricting investment to those areas which pose a high risk to the delivery of contracted gas to our customers. This resulted in a reactive, rather than proactive approach to lifecycle management in Corporate IT.

In 2017 DBP, Australian Gas Networks (AGN) and Multinet Gas Networks (MGN) came together as a group, to form Australian Gas Infrastructure Group (AGIG). AGIG inherited a portfolio of disparate systems across each of these entities at varying stages of their lifecycle.

Towards the end of AA4, we were making changes to grow our Corporate IT team so that we could separate day-to-day operations and project delivery – and reduce technical debt by moving to a more proactive device and application lifecycle management.

In late 2019, following MGN’s successful IT separation from United Energy, we developed the AGIG IT Strategy and Roadmap. The roadmap set out a two-phased approach to stabilise and consolidate the technology environment across AGIG’s businesses aimed at leveraging economies of scale and standardising and simplifying processes across the group.

Through AA5, we have continued this journey and now have a mature and well-resourced IT function with the capability to support our day-to-day operations and deliver IT projects that meet our business and customer needs into the future.

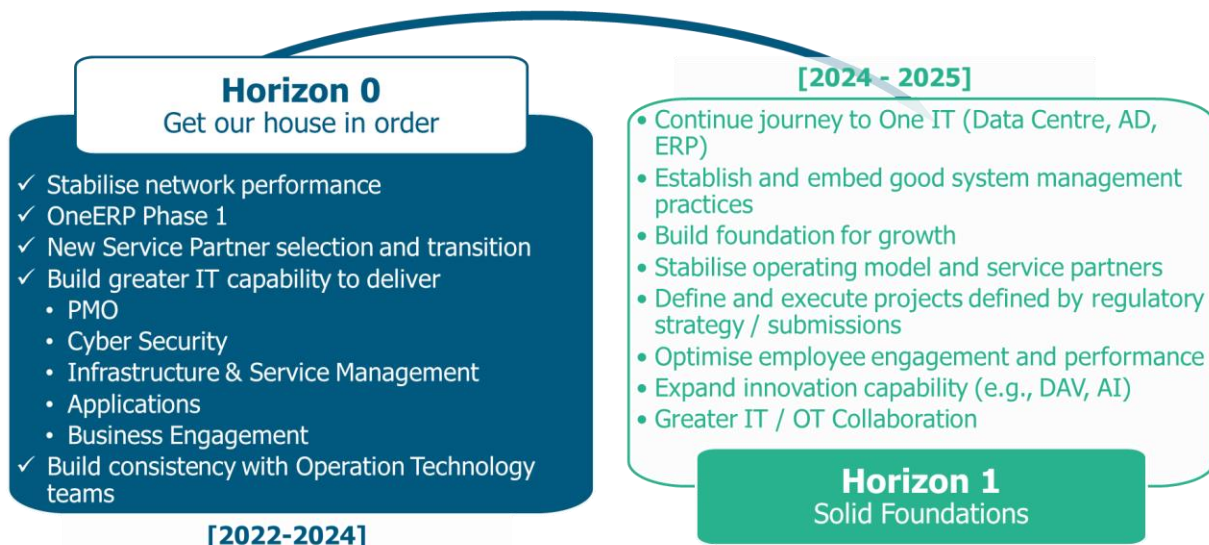
For DBP, the AGIG IT Strategy and Roadmap has seen:

the move of corporate systems from varied infrastructure as a service arrangement in 2021 to the centralised AGIG data centre;

- improved cyber security monitoring and risk management;
- successful roll out of OneERP; and
- centralised IT service desk and standardised IT processes.

Figure 1 summarises what we have delivered for DBP in AA5 under our AGIG IT Strategy.

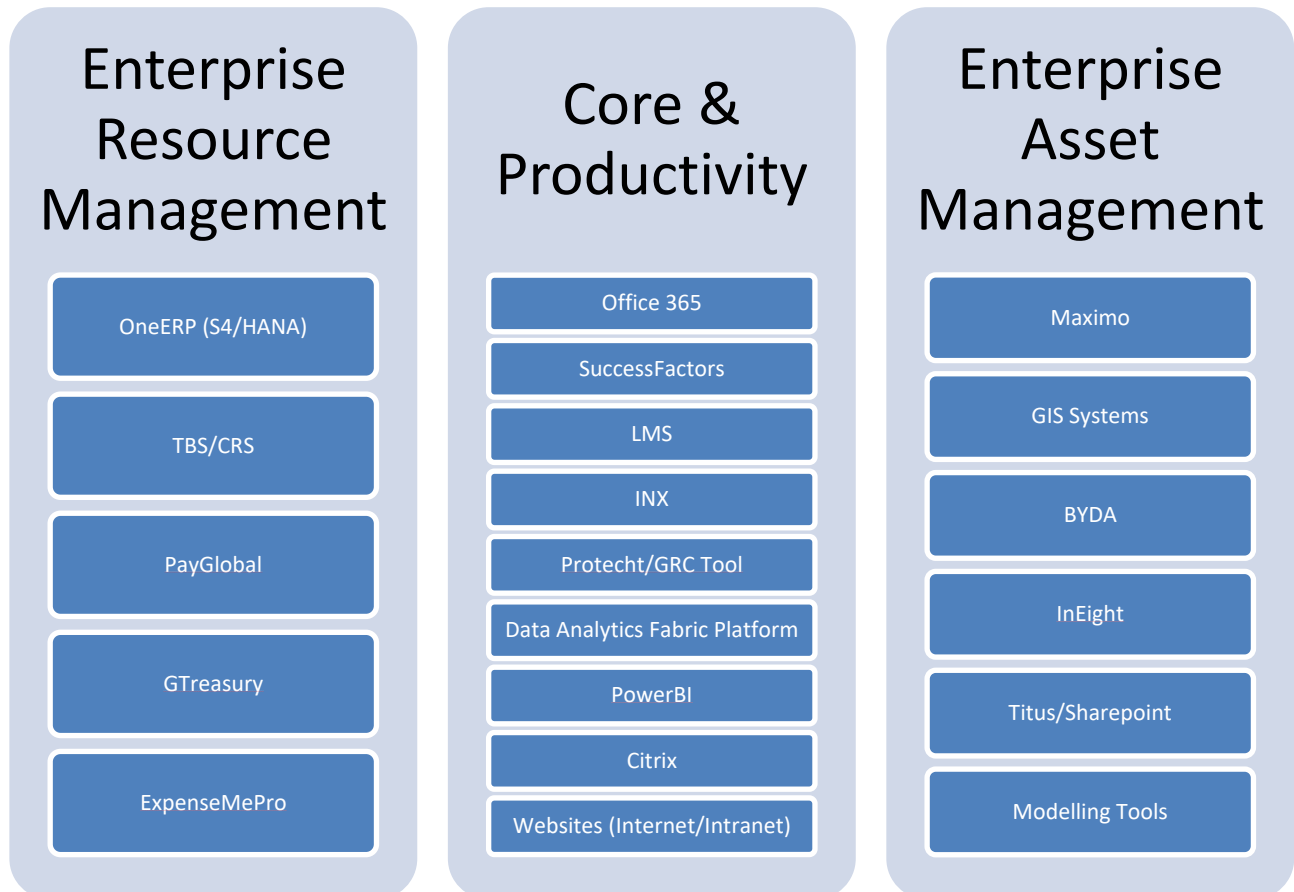
Figure 1: What we have delivered for DBP in AA5 under the AGIG IT Strategy



## 1.1 Core IT architecture

Our current application landscape is summarised below in Figure 3. While our systems align with current business needs, we are replacing our billing system (CRS) with a fit for purpose transmission billing system (TBS) to manage the uncertainties that exist in relation to its dependency, reliability and supportability over the longer term.

Figure 3: Current application landscape by function



Our key business systems are outlined in Table 1.1.

Table 1.1: Overview of key business systems

System	Functionality
Enterprise resource planning (S4/HANA)	Provides the platform for all accounting, budgeting and planning and tax functionality
Customer Reporting System (CRS) to be replaced with Transmission Billing System (TBS)	Provides transaction workflows, meter readings and delivery point billing Gas Transmission Billing system, integrates with existing systems such as SCADA and OneERP and manages the end-to-end business needs of gas transmission, including shipper nominations, scheduling and apportionment, invoicing and reporting.
Health, Safety and Environment including land management (INX)	Safety management system helping to streamline our safety management and risk management processes. Includes corrective actions, email notifications and escalations, risk and compliance management.



System	Functionality
PayGlobal	Provides payroll functionality and is integrated with S4/HANA (OneERP)
GTreasury	Treasury system
Enterprise asset management (IBM Maximo)	Provides planning, dispatching work, job completion details, delivery point status management, preventative maintenance, contractor payment and meter management services
Geospatial Information System (GE Smallworld, ArcGIS)	Provides management of map-based (Cadastre), delivery point lifecycles, pipeline configuration and connectivity, emergency response and pipeline integrity, extension and replacement planning
ExpenseMePro	Provides management of day-to-day expenses incurred by employees and via corporate credit cards
SuccessFactors	HR system
LMS	Learning Management Tool
Protecht	Risk Management/GRC solution
Data Analytics Fabric Platform	Provides the platform for data analytics.
PowerBI	Provides visualisation and reporting tools for data.
Mipela Before You Dig Australia (BYDA)	Provides asset location information to third parties who are looking to undertake excavation work.
InEight	Provides storage and management of engineering drawings.
Titus/SharePoint	Provides storage and management of Engineering Standards and other important engineering ation.
Modelling tools	Various specialised modelling tools providing modelling and scenario planning for several disciplines such as engineering, pipeline control, economics etc e.g. DNV Phast, SiroGas

To maintain the security and integrity of the DBP IT environment and to keep technology risks as low as reasonably practical (ALARP), our application landscape and delivery models require modernisation and ongoing renewal.

We manage many of our programs, such as software application upgrades and updates, infrastructure renewal and cyber security, across AGIG. Our application and infrastructure renewal program seeks to maintain our existing suite of IT applications and supporting infrastructure at an acceptable industry standard by scheduling updates and refreshes so that the ongoing IT renewal program is delivered in an efficient and seamless manner. It also looks for opportunities to streamline the application suite across AGIG, where it is practical and cost-effective to do so. Our cyber security program ensures a secure and resilient AGIG by building robust cyber capabilities in people, processes and technology.

Given the national management approach, most IT capex required to deliver the program of work for DBP over AA6 has been estimated in total (across AGIG) and then allocated to DBP on the most appropriate basis. This is consistent with methods adopted in previous regulatory submissions and has previously been endorsed by the ERA and the AER. Successful and efficient delivery of the national applications renewal, infrastructure renewal and cyber programs requires approval of this approach in all jurisdictions.

## 1.2 Vision objectives

Our vision is to be the leading gas infrastructure business in Australia. To help achieve this vision we have a set of vision objectives, which are to deliver for customers in terms of safety, reliability and customer service, be a good employer, and sustainably cost efficient.

Having fit for purpose and efficient IT systems plays a big part in achieving these vision objectives. IT systems support the day-to-day running of the business and allow us to operate the pipeline safely and reliably. The running costs of IT are also a direct contributor to our efficiency. Rapid growth in the IT landscape requires a vigilant, continuous improvement approach to ensure IT systems performance is 'fit-for-purpose', robust, resilient to external threats and delivered at the lowest possible cost.

This IT investment plan is designed to support our vision objectives. Our IT investments over AA6 will:

- Deliver for customers:
  - We will maintain and update our critical business systems in line with manufacturer requirements and further uplift our cyber capabilities to mitigate the substantial risks associated with IT failure or security breaches of our critical business systems. This in turn minimises safety risks to customers and employees, as well as unplanned outages and disruption of supply for customers.
  - We will continue to improve data capture, collation and analysis to ensure the visibility and mitigation of safety and reliability risks and better enable our business to manage assets in line with our agreed risk profile (e.g. more real time information on asset components identified as showing signs of deteriorating reliability will allow this information to be integrated into the maintenance/replacement prioritisation and scheduling processes).
  - We will maintain modernised customer services to meet the expectations of our customers, allowing them to interact with us in more ways and get timely access to information about their service and any pipeline activities that might impact them.
- Help us be a good employer:
  - Our investments to upgrade and enhance our IT systems and infrastructure will ensure our employees continue to have access to the right tools and systems to undertake their work. Enhancements like field connectivity and the Contract Management System will provide access to more timely information, reduce employee frustration, minimise the potential for errors and support employee engagement and skills development.
- Keep us sustainably cost efficient:
  - By taking a risk-based approach to maintaining and updating our critical business systems in line with manufacturer requirements we will avoid significantly higher overall lifecycle costs (e.g. needing to hire expensive IT specialists for urgent work to correct system issues) and reduce the potential for compliance breaches and the associated financial penalties and costs (e.g. related to compromised staff and customer data).

- By maintaining and updating our critical business systems as part of a nationally coordinated program we will achieve economies of scale and scope.
- By investing in system enhancement such as automating some currently manual processes, we will provide tangible economic benefits to customers including, for example, through process efficiencies (reducing time and effort) and increasing project optimisation.

### 1.3 Stakeholder engagement

We are committed to operating our pipeline in a manner consistent with the long-term interests of our customers. To facilitate this, we conduct regular engagement to understand and respond to the priorities of our customers and stakeholders. Feedback from customers and stakeholders is built into our asset management considerations and is an important input when developing and reviewing our expenditure programs.

Customer preferences and expectations have been explored and assessed through a series of independently facilitated roundtables. All documentation from this engagement is provided on our dedicated engagement website, Gas Matters<sup>2</sup>.

When customers interact with us, they expect us to be responsive and provide effective resolution, which is facilitated by our newly implemented OneERP platform. They expect transparent and accurate billing process which we will deliver with our Transmission Billing System. They value reliability and safety which is why we are aiming to achieve compliance with SP-2 in the Cybersecurity space to ensure that our business operations are unaffected by any potential cyberattacks.

This plan, and the proposed IT projects outlined in it, are designed primarily to maintain the existing IT environment and services, while modernising the way we work and mitigating a range of IT safety and security risks. This in turn allows us to operate the pipeline consistent with technical specifications, safety standards and compliance requirements, thereby helping maintain a safe and reliable service to customers.

Further information on our stakeholder engagement program is available in Chapter 5 of our Final Plan.

### 1.4 Basis of cost estimates

Cost forecasts for IT programs have been developed using a bottom-up methodology utilising a combination of tenders, historical costs for similar programs of work delivered, vendor cost estimates or advice from independent expert consultants.

All costs presented in this plan are direct dollars of December 2024 unless otherwise labelled.

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<sup>2</sup> <https://gasmatters.agig.com.au/victorian-engagement-plan>

## 2 Our IT investment plan

### 2.1 Overview

The program of work planned for AA6 is designed to:

- maintain the current levels of IT services; and
- enable efficient and effective delivery of services in line with our customers' expectations.

Much of our expenditure to maintain the current levels of IT services is recurrent in nature. This is because it involves updating/renewing existing software applications and infrastructure that retain substantially the same services, functionalities, capabilities and market benefits as existed prior to the updates. From time to time, large investment to replace or transition a core system/s is required.

Other IT expenditure to enable efficient and effective delivery of services to customers, including a new digital field mobility solution, is new. This is because it involves investment in new systems to allow us to more effectively operate the pipeline and the broader business.

We will also continue to seek opportunities for further alignment of our IT systems and infrastructure across AGIG.

Table 2.1: IT program of work by business case \$'000 December 2024 CAPEX

IT program of work	2026	2027	2028	2029	2030	Total AA6
<b>IT Sustaining Applications (DBP21)</b>						
Major and minor upgrades	3,333	1,859	1,436	5,908	1,251	<b>13,787</b>
Application enhancements	1,750	1,450	1,450	1,350	1,350	<b>7,350</b>
<b>IT Sustaining Infrastructure (DBP30)</b>						
End-user devices	1,405	765	765	765	765	<b>4,465</b>
Network and currency	2,229	1,995	864	602	1,663	<b>7,353</b>
Data centre	397	126	125	125	231	<b>1,004</b>
Field connectivity	750	750	-	-	-	<b>1,500</b>
<b>Cyber Security (DBP23)</b>						
Maintain cyber currency	773	942	426	222	414	<b>2,777</b>
Uplift cyber capability	1,723	686	1,014	890	412	<b>4,725</b>
<b>Total</b>	<b>12,359</b>	<b>8,573</b>	<b>6,079</b>	<b>9,861</b>	<b>6,087</b>	<b>42,959</b>

#### 2.1.1 Strategic objectives

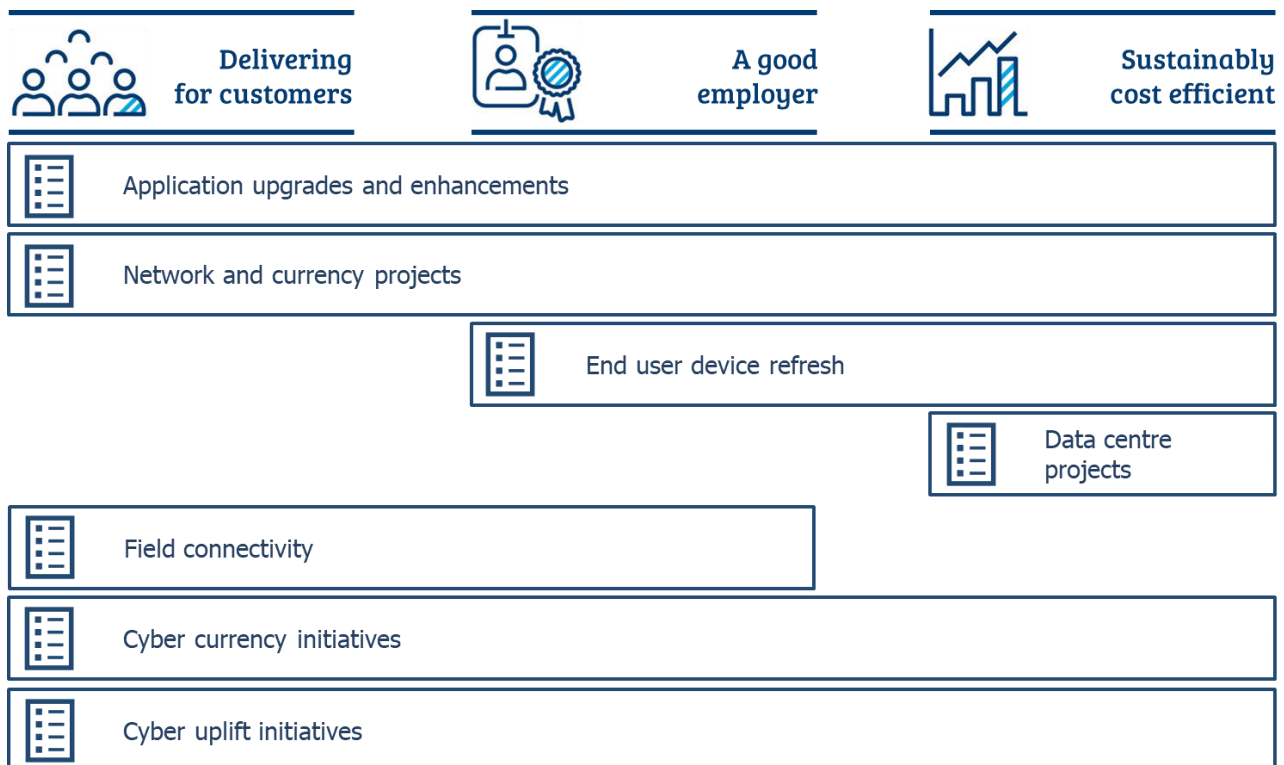
The projects and programs planned for the next five-year period are integral in delivering our IT strategic objectives. Figure 2.1 sets out our IT strategic objectives and Figure 2.2 shows how the

program is connected and targeted to delivering on our objectives. Further to this, Appendix A explains how each program contributes to achieving each objective.

Figure 2.1: Our IT strategic objectives



Figure 2.2: Summary of program by objectives



### 2.1.2 Expenditure treatment

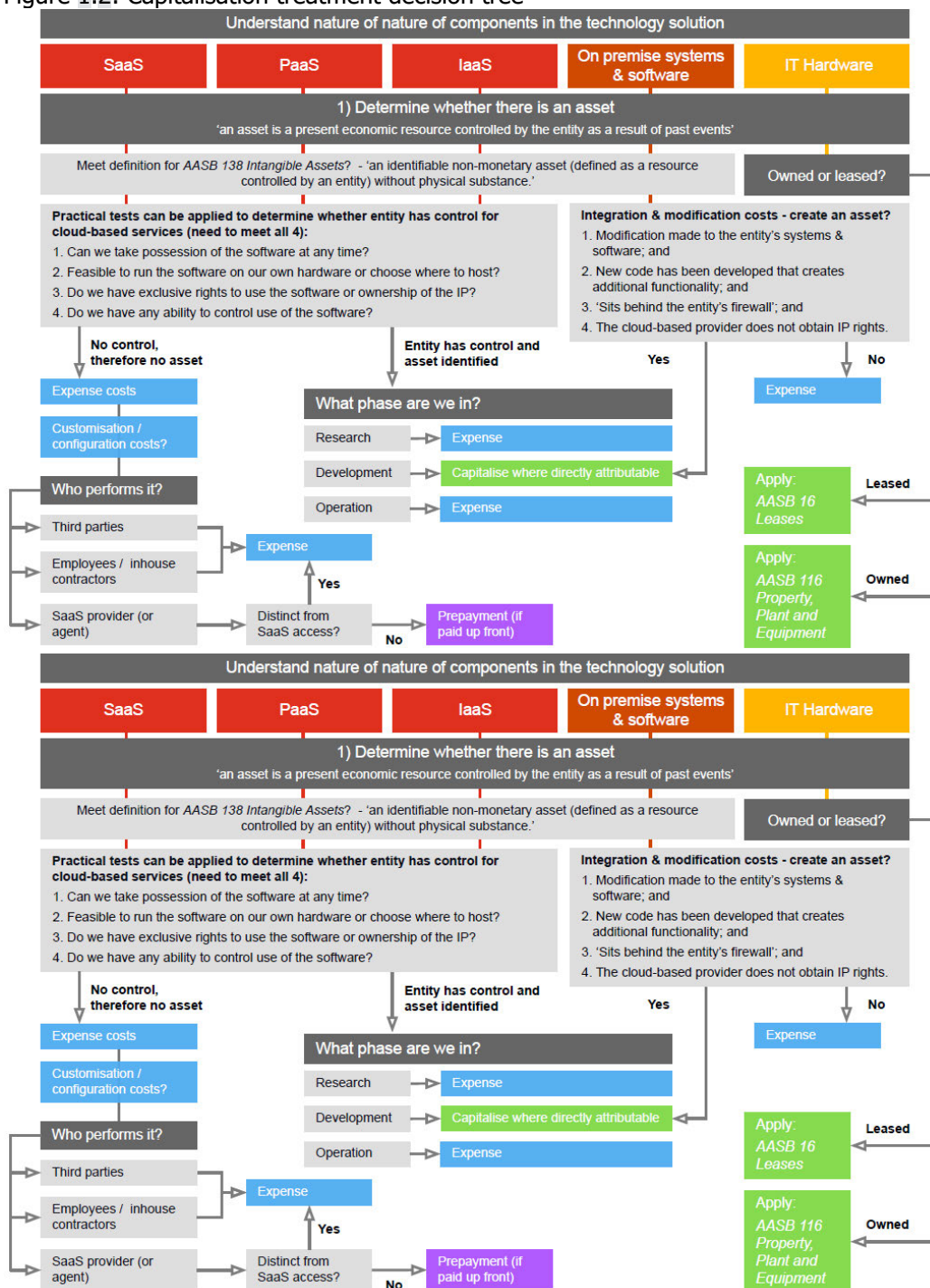
It is important to highlight that the way many vendors provide applications is changing. There is a trend across the IT sector that is moving away from providing on-premises solutions and ownership of software applications, and instead offering 'software as a service' (SaaS) and 'platform as a service' (PaaS):

- SaaS is a cloud computing model where software applications are delivered over the internet as a service. Instead of installing and maintaining software on individual devices, users access these applications through a web browser.
- PaaS is a cloud computing model that provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the underlying infrastructure.

The charging models for SaaS and PaaS are evolving, with software often provided via a subscription fee, which is expensed as opex, rather than capitalised as an asset. Several vendors, such as SAP and IBM are moving away from on-premises services or client-owned software completely and are ceasing technical support for non-SaaS and non-PaaS solutions (or charging a premium for maintaining them). As a result, many businesses have little option but to move to the more opex-intensive SaaS and PaaS models.

As part of the move to SaaS and PaaS, we have considered the appropriate capitalisation treatment for each. Our capitalisation approaches are shown in [Figure 1.2](#).

Figure 1.2: Capitalisation treatment decision tree



Ongoing operating costs for SaaS, and technical support are increasing across the IT sector, resulting in higher ongoing IT opex. While some of these opex increases will be offset by reduced physical infrastructure costs and result in more efficient processes in the long term, we will continue to incur opex step increases in the near term as the accounting treatment changes with the types of assets we are investing in.

To ensure the shift in applications-related opex is captured, our IT business cases also show the incremental increases or decreases in ongoing opex related to our applications being upgraded or new applications being implemented. These estimates are based on advice for ongoing SaaS, support and maintenance costs from vendors.

## 2.1.3 Summary of spend

### 2.1.3.1 IT Capex

IT capex in AA6 is forecast to be \$43 million. This is consistent with the \$44 million forecast to be spent in AA5 and \$17 million (67%) higher than the \$26 million approved for AA5. 2 shows the split of recurrent and non-recurrent IT investment forecast for AA6, and a comparison of the total investment expected to be undertaken by the end of AA5 (January 2021 to December 2025).

Table 2.2: Proposed IT investment \$'000 December 2024

IT program of work	2026	2027	2028	2029	2030	Total AA6	Total AA5
Maintain current levels of IT services (recurrent)	8,136	5,687	3,615	7,621	4,325	<b>29,385</b>	47,680
Efficient and effective service delivery (non-recurrent)	4,22	2,886	2,464	2,240	1,762	<b>13,575</b>	2,679
<b>Total</b>	<b>12,359</b>	<b>8,573</b>	<b>6,079</b>	<b>9,861</b>	<b>6,087</b>	<b>42,959</b>	<b>50,359</b>

Tables may not sum due to rounding

These categories of recurrent and non-recurrent investment, and the projects included in each, are discussed in the sections that follow.

AA5 IT Capex is discussed in more detail below at Section 2.5.

### 2.1.3.2 IT Opex

IT opex in AA6 is forecast to be \$50 million. This is an uplift of \$20 million compared to that expected in AA5, largely driven by operating costs for new systems (i.e. OneERP and cyber uplift) and changing expenditure treatment for cloud hosted systems (i.e. TBS, Maximo and SAP Rise).

Table 2.3: Proposed IT opex \$'000 December 2024

IT opex	2026	2027	2028	2029	2030	Total AA6	Total AA5
Base opex	7,605	7,605	7,605	7,605	7,605	38,025	31,325
<b>Step changes</b>							
TBS PaaS	349	349	349	349	349	1,745	
SAP Rise	861	889	889	889	889	4,416	
Signavio SaaS	80	80	80	80	80	400	
Maximo SaaS	-	320	50	90	120	580	
Data Centre Uplift	147	275	382	469	536	1,809	
Cyber Security Uplift	133	536	536	536	536	2,277	
<b>Total</b>	<b>9,403</b>	<b>10,282</b>	<b>10,119</b>	<b>10,246</b>	<b>10,343</b>	<b>50,393</b>	<b>30,685</b>



The proposed IT Opex step changes for AA6 are outlined in more detail in the IT Opex (DBP37) business case.

AA5 IT operating expenditure is discussed in more detail below at Section 2.6.

## 2.2 Maintaining current levels of service

IT supports pipeline operations by procuring and maintaining hardware and software systems used to collect, organise and store business and pipeline information. Recurrent 'stay in business' investment is required to ensure we maintain the current levels of IT services and mitigate the security and integrity risks associated with our core business systems. This helps mitigate any network risk that could arise from an IT system failure.

Maintaining current levels of services is largely achieved via recurrent IT application and infrastructure renewal programs, as well as our national cyber security programs. These programs deliver a prudent cycle of major and minor system upgrades and infrastructure replacements as required, and a risk-based approach to managing cyber risks. This is critically important given the ever-changing nature of cyber threats we face and the importance of ensuring that critical infrastructure in Australia, such as the networks and pipelines we own and operate, are resilient to cyber-attacks, forecast recurrent IT capex overview.

Over AA6 we propose to invest \$29 million on recurrent initiatives. This is around \$12 million lower than the \$41 million we expect to invest in AA5, and accounts for 68% of the total IT capex forecast.

Table 2.4 profiles the forecast recurrent IT investment over AA6 and includes a comparison with the total recurrent IT investment we expect to make by the end of AA5.

Table 2.4: Proposed recurrent IT investment \$'000 December 2024

Recurrent expenditure	2026	2027	2028	2029	2030	Total AA6	Total AA5
IT Sustaining Applications (major and minor upgrades)	3,333	1,859	1,436	5,908	1,251	<b>13,787</b>	<b>41,927</b>
Cyber Security Currency	773	942	426	222	414	<b>2,777</b>	-
IT Sustaining Infrastructure	4,030	2,886	1,753	1,491	2,660	<b>12,821</b>	<b>5,754</b>
<b>Total</b>	<b>8,136</b>	<b>5,687</b>	<b>3,615</b>	<b>7,621</b>	<b>4,325</b>	<b>29,385</b>	<b>47,680</b>

The following sections provide an overview of the applications and infrastructure renewal programs.

### 2.2.1.1 IT Sustaining Applications (major and minor upgrades) (DBP21)

The IT sustaining applications major and minor upgrades program is recurrent 'stay in business' expenditure that involves periodic updates to critical business software applications, in particular, vendor version updates. The updates ensure we have reliable, secure, compliant and efficient business processes and systems, with appropriate vendor support, preserving the ongoing integrity and compliance of our data and services.

The proposed program in AA6 delivers upgrades on a risk-based assessment of business need. The upgrade program typically scales up and down across AA periods, depending on the suite of applications falling due for investment. The major and minor upgrades are recurrent in nature as

they result in the software and applications retaining substantially the same services, functionalities, capabilities and market benefits.

In AA6 the IT Sustaining Applications major and minor upgrades includes upgrades and replacements as required for the following applications:

- SAP S4/HANA
- HSE capability - INX
- Data archiving
- Transmission billing system (TBS)
- Maximo
- Protecht GRC
- SAP SuccessFactors
- Public websites
- Application architecture tool
- Centralised GIS database
- Data Analytics & Visualisation (DAV) Platform
- Other core systems

In AA6, the major and minor upgrades expenditure forecast is \$14 million. This is \$28 million lower than what we forecast for AA5 due to the completion of two critical system replacements (OneERP and TBS) completed in AA5. We therefore consider the forecast for AA6 represents a prudent and deliverable program that reflects the likely ongoing cost of maintaining our critical applications. Table 2.5 shows the expenditure profile by application.

Table 2.5: Proposed applications major and minor upgrades program investment \$'000 December 2024

<b>Applications renewal</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>Total AA6</b>
SAP S4/HANA	-	-	-	3,250	-	<b>3,250</b>
HSE capability - INX	126	119	63	66	69	<b>443</b>
Data archiving	148	98	108	119	131	<b>604</b>
Transmission billing system refresh	248	348	446	248	446	<b>1,736</b>
Maximo version 9 upgrade	1,600	-	-	1,400	-	<b>3,000</b>
Protecht GRC	385	196	-	168	-	<b>749</b>
SAP SuccessFactors	130	130	130	130	130	<b>650</b>
Public websites	345	-	233	-	-	<b>578</b>
Enterprise architecture tool	71	84	102	96	91	<b>444</b>
Centralised GIS database	80	684	154	231	184	<b>1,333</b>
Other core systems	200	200	200	200	200	<b>1,000</b>
<b>Total</b>	<b>3,333</b>	<b>1,859</b>	<b>1,436</b>	<b>5,908</b>	<b>1,251</b>	<b>13,787</b>

Totals may not sum due to rounding

Further detail on major and minor upgrades is available in the IT Sustaining Applications Business Case (DBP21) provided in Attachment 9.5 to the Final Plan.

### 2.2.1.2 Cyber Security Currency (DBP23)

The Cyber Security program in AA6 continues our work to ensure a secure and resilient AGIG by building robust cyber capabilities in people, processes and technology. As a responsible pipeline operator, we must ensure the ongoing security of our network assets, as well our data and our customers data. Not only is this activity necessary to mitigate risk, but it is required by our Foreign Investment Review Board (FIRB) licensing provisions, as well as Security of Critical Infrastructure (SOCI) and Privacy legislation.

In total, we forecast \$3 million in AA6 to maintain cyber currency across IT and OT. Our Cyber Security Currency program is new to AA6 and will maintain currency of the uplift in cyber security investment we have made in AA5.

Table 2.6: Proposed Cyber Security maintain currency program investment \$'000 December 2024

Cyber Security Currency	2026	2027	2028	2029	2030	Total AA6
Cyber Security technology refresh (IT)	176	-	13	-	192	<b>381</b>
Corporate Firewall/s refresh (IT)	-	720	-	-	-	<b>720</b>
DBP OT Firewall/s refresh (OT)	101	101	101	101	101	<b>505</b>
DBP CSN Firewall/s refresh (OT)	375	-	-	-	-	<b>375</b>
DBP OT Cyber Security Technology refresh (OT)	121	121	121	121	121	<b>605</b>
DBP Privileged Access Management (PAM) Hardware refresh (OT)	-	-	191	-	-	<b>191</b>
<b>Total</b>	<b>773</b>	<b>942</b>	<b>426</b>	<b>222</b>	<b>414</b>	<b>2,777</b>

Our Cyber Security cyber currency program is covered in more detail in the IT Security business case (DBP23) provided in Attachment 9.5 IT Business Cases.

### 2.2.1.3 IT Sustaining Infrastructure (DBP30)

The IT sustaining infrastructure program is a 'stay in business' program that involves periodic renewal of network, data centre and end-user devices such as laptops, audio/visual equipment, telephony, internet links and servers that underpin the delivery of all DBP services. The refresh of infrastructure at the end of its useful life ensures we continue to maintain reliable, secure, compliant and efficient business processes, systems and services while keeping the risk of service interruptions, cyber breaches and degraded performance at an acceptable level.

In AA5, we moved a few applications from varying infrastructure as a service arrangement to the AGIG data centre and centralised end-user equipment management across AGIG realising benefits of consistent device management and more competitive pricing on higher volume orders. We are now seeing opportunities to leverage the industry trend of moving from company-owned infrastructure to cloud-based infrastructure hosting, which we have assessed in our business case for AA6.

The forecast cost of infrastructure refresh over AA6 is \$13 million. This investment provides for DBP's allocation of shared infrastructure and direct costs of DBP specific infrastructure, office and end user equipment.

Forecast expenditure on infrastructure refresh in AA6 is \$7 million higher than in AA5, as shown in Table 1.12. This uplift is due to the insourcing of IT infrastructure works, more proactive lifecycle management better aligned to good industry practice (and minimising technical debt) and an increase in end user devices across our workforce.

As mentioned above, infrastructure was previously provided through varying service agreements with outsourced providers. In 2021, we decided to deliver our own IT infrastructure program in house as part of the broader program to deliver a single national consolidated IT platform. DBP systems and applications have been moved to this platform as practical (i.e. aligned with system upgrades/replacements). This has resulted in a move of the costs associated with IT infrastructure from opex to capex. For those systems moved across before 2024, this new arrangement is reflected in our base year opex. Our opex step changes proposed for AA6 consider the cost implications of any further moves, as well as our assessment of organic transition to cloud.

Table 2.7 shows the expenditure profile by infrastructure.

Table 2.7: Proposed infrastructure renewal program investment \$'000 December 2024

Infrastructure renewal	2026	2027	2028	2029	2030	Total AA6
End User Devices	1,405	765	765	765	765	<b>4,465</b>
Network and currency	2,229	1,995	864	602	1,663	<b>7,353</b>
Data Centre	397	126	125	125	231	<b>1,004</b>
Field Connectivity	750	750	-	-	-	<b>1,500</b>
<b>Total</b>	<b>4,780</b>	<b>3,636</b>	<b>1,753</b>	<b>1,491</b>	<b>2,660</b>	<b>14,321</b>

## 2.3 Enabling effective and efficient delivery of services to customers

Fundamental to our vision objective of remaining sustainably cost efficient is our ability to identify ways of delivering services at a lower cost or in a more efficient manner. IT investments play a major role in this, as technological developments can often help us manage the network or provide customer service more efficiently.

We therefore adopt a continuous improvement approach in our technology environment, seeking to invest in IT improvements where practicable. Typically, these investments involve developing new IT systems undertaking large scale overhauls of existing systems, meaning the expenditure is non-recurrent.

Our IT improvement investments aim to:

- reduce the cost of asset management – we look to drive further efficiencies in current business activities through improvements in asset management, including by introducing more sophisticated tools for planning expansion and replacement programs and for network operations;
- improve our analytics capability – we will build our analytics capability to better connect operational data and information with core business data by improving the collation, integration and organisation of data and information from multiple systems and developing tools to facilitate data and information access and interpretation for forecasting and operational insights;

- respond to changing external conditions – we will continue to enhance our cyber capabilities to ensure we maintain a secure and resilient environment to changing external threats adopting new technologies and processes as appropriate and in line with good industry practices;
- increase efficiency through greater automation and alignment of our processes – we will continue to develop our field mobility and process automation programs to further automate current manual tasks and allow improved monitoring, more accurate data and information capture and improved integration of data and information into necessary systems; and
- meet changing customer expectations – we will upgrade our systems to enable us to deliver services and information to our customers digitally in line with customer expectations of a modern utility.

Our recent focus has been on overhauling our key systems to enable more efficient operations and better customer service. We will continue to leverage, develop and build these capabilities over subsequent AA periods.

### 2.3.1 Forecast non-recurrent IT capex overview

Over AA6 we propose to invest \$14 million on non-recurrent initiatives. This is around \$11 million higher than the \$3 million we expect to invest in AA5, and accounts for 32% of the total IT capex forecast.

Table 2.8 profiles the forecast non-recurrent IT investment over the next AA period and includes a comparison with the total non-recurrent IT investment we expect to make by the end of the current AA period.

Table 2.8: Proposed non-recurrent IT investment \$'000 December 2024

Non-recurrent IT	2026	2027	2028	2029	2030	Total AA6	Total AA5
IT Sustaining Applications (enhancements)	1,750	1,450	1,450	1,350	1,350	<b>7,350</b>	-
Cyber Security Uplift	1,723	686	1,014	890	412	<b>4,725</b>	<b>1,762</b>
IT Sustaining Infrastructure Field connectivity	750	750	-	-	-	<b>1,500</b>	-
IT Enabling	-	-	-	-	-	-	<b>917</b>
<b>Total</b>	<b>4,223</b>	<b>2,886</b>	<b>2,464</b>	<b>2,240</b>	<b>1,762</b>	<b>13,575</b>	<b>2,679</b>

Totals may not sum due to rounding

The following sections provide an overview of the non-recurrent IT investment initiatives.

#### 2.3.1.1 IT Sustaining Applications enhancements

We forecast \$7 million of IT Sustaining Applications enhancements initiatives in AA6. This is a new program which we have not spent any money on in AA5.

Application enhancements are improvements or additions in system or application functionality to meet changing business requirements. The included allowance for application enhancements in AA6 ensures we can optimise business processes by ensuring appropriate and fit-for-purpose application functionality exists based on an identified business need. This ensures we are utilising

our existing applications suite to its full potential, delivering application enhancements to keep pace with business and customer needs.

Table 2.9: IT Sustaining Applications enhancements investment \$'000 December 2024

Application enhancements	2026	2027	2028	2029	2030	Total AA6
SAP S/4HANA incremental functionality	650	650	650	650	650	<b>3,250</b>
Maximo incremental functionality	200	200	200	200	200	<b>1,000</b>
Contract management system	300	-	-	-	-	<b>300</b>
Other system enhancements	600	600	600	500	500	<b>2,800</b>
<b>Total application enhancements</b>	<b>1,750</b>	<b>1,450</b>	<b>1,450</b>	<b>1,350</b>	<b>1,350</b>	<b>7,350</b>

More detail on our IT Sustaining Applications enhancements initiatives can be found in the IT Sustaining Applications business case (DBP21) provided in Attachment 9.5 IT Business Cases.

### 2.3.1.2 Cyber Security Uplift (DBP23)

The cyber security threat landscape continues to evolve and increase in complexity, with breaches causing significant issues for organisations. There have been multiple publicised high-profile breaches of data privacy requirements within Australia in the last few years, with damages running to tens of millions of dollars per breach event. There have also been several threats against critical service providers, including breaches of operational networks. We must therefore ensure that we not only maintain our existing controls in AA6, but also continue to add controls, improving our cyber security maturity to be able to identify and respond to the new threats posed. Left untreated, the identified gaps in our controls drive a high residual risk level by the end of the upcoming AA6 period, with the potential for significant consequences for DBP and our customers.

We propose to invest \$5 million in Cyber Security uplift activities in AA6 to address the key identified risk areas of Data Privacy & Security, Access Control and Code Management. This is around \$3 million higher than what we forecast to spend on cyber uplift activities in AA5.

Table 2.10: Proposed Cyber Security Uplift investment \$'000 December 2024

Project	2026	2027	2028	2029	2030	Total
<b>Uplift OT</b>						
OT TVM solution	-	-	-	279	184	<b>463</b>
OT vulnerability management program	-	-	51	-	-	<b>51</b>
OT security consolidation & integration	-	245	613	511	128	<b>1,496</b>
DBP CSN cyber security capabilities uplift	100	100	100	100	100	<b>500</b>
DBP ICS code management solution	510	-	-	-	-	<b>510</b>
<b>Uplift data privacy and security</b>						
DLP solution	380	-	-	-	-	<b>380</b>

CASB solution	192	-	-	-	-	<b>192</b>
Data governance and protection framework	241	-	-	-	-	<b>241</b>
<b>Uplift access control (IT)</b>						
Zero trust network architecture	153	341	-	-	-	<b>494</b>
PAM session management	-	-	239	-	-	<b>239</b>
IAM platform enhancements	146	-	11	-	-	<b>157</b>
<b>Total</b>	<b>1,723</b>	<b>686</b>	<b>1,014</b>	<b>890</b>	<b>412</b>	<b>4,725</b>

Our Cyber Security uplift program is included in the Cyber Security business case (DBP23) provided in Attachment 9.5 IT Business Cases.

### 2.3.1.3 IT Sustaining Infrastructure Field Connectivity (DBP30)

The Field Connectivity initiative looks to take advantage of mobility functions now available in the current (or soon to be upgraded) business systems including our asset management system (Maximo), procurement system (SAP S/4 HANA) and HSE incident management system (INX) by procuring appropriate hardware devices and infrastructure/network services which will be rolled out to field staff. With these new devices and connectivity, field staff will be able to download asset data, order parts, and log safety incidents in the field, increasing the efficiency of our operations and reducing the amount of paper we print.

Table 2.11: Field connectivity investment \$'000 December 2024

<b>Field connectivity</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>Total AA6</b>
Field connectivity	750	750	-	-	-	<b>1,500</b>
<b>Total</b>	<b>750</b>	<b>750</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,500</b>

The field connectivity initiative is detailed in the Field connectivity business case (DBP36)

## 2.4 Deliverability of the IT plan

The end-to-end portfolio of work was developed and will be delivered using a formal governance framework consistent with our industry standard IT project management methodology. The portfolio and project governance for technology IT projects provides a decision-making framework that is logical, robust and repeatable. This not only increases the opportunity for success but also allows us to prioritise (and reprioritise if necessary) projects to ensure prudent and efficient use of IT resources.

We have a successful track record of delivering large IT transformation projects across AGIG, such as the separation of Multinet Gas from United Energy, the AGIG Data Centre and the OneERP project.

The overall portfolio of work in AA6 is lower than that undertaken over AA5, however is made up of a greater number of smaller projects comparatively. We have key relationships with external vendors in place that will continue to support the delivery of our IT Strategy and works have been staged to ensure we have a well-balanced resource profile of internal resources to allow for the most efficient

and successful delivery. We have robust controls and vendor arrangements in place to ensure successful delivery of the planned program in its entirety, including:

- executive leadership support and strong portfolio and project governance;
- a sound project management methodology including robust risk analyses which are revisited regularly throughout the life of the project;
- stakeholder engagement in planning phases; and
- internal and external capacity with the appropriate skills and experience.

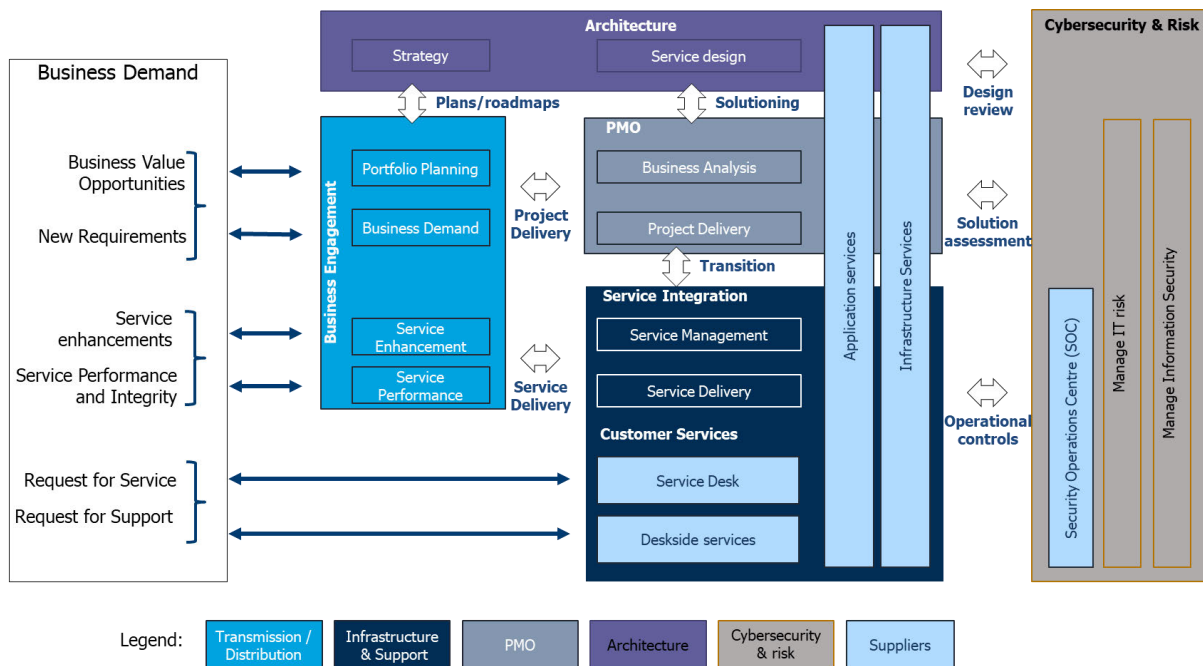
During AA5, the IT team and our external vendor partnerships have been restructured and expanded to align more closely with the business and improve delivery of IT services. This has allowed us to deliver a larger portfolio of works compared to what we initially forecast for the period.

The diagrams below depict the IT@AGIG teams, their functions and the delivery of IT services.

Figure 2.3: IT@AGIG team functions

IT Team	IT Business Engagement	Architecture and Applications	OneERP	Portfolio Management Office (PMO)	IT Infrastructure and Support	Cyber Security and Risk	IT Vendor and Commercial Management
What we do	IT Business Engagement works with teams across the business to discuss IT needs and ensure all platforms meet your current and future requirements. The team is also your first stop to discuss enhancements and new requirements.	Architecture and Applications provides overarching technology governance along with managing, supporting and enhancing our applications. The team is also responsible for our technology lifecycle roadmap.	OneERP provides knowledge and support of the operational OneERP applications, as well as guidance and active involvement in the future program of work. You can talk to the team about OneERP training, support or to discuss enhancements.	The Portfolio Management Office plans and delivers the strategic technology projects under a robust portfolio and project governance framework.	Infrastructure and Support is responsible for the service desk and supports, maintains and improves our network and infrastructure that underpins the applications and systems used across AGIG.	Cyber Security and Risk is responsible for the strategic framework and operational activities to ensure compliance with standards and protection from cyber threats and the Enterprise Risk Management practices.	IT Vendor and Commercial Management manage the commercial and contractual arrangements with IT suppliers in accordance with AGIG and regulatory governance frameworks.

Figure 2.4: IT@AGIG delivery of IT services





## 2.5 Summary of AA5 Investment

In AA5 we forecast we will invest \$50 million in IT. This is around \$24 million (94%) above our approved allowance of \$26 million. As discussed in section 2.2.1.1 (and below), this higher-than-forecast expenditure is due to:

- a change in approach to management of infrastructure, and the need to replace some data centre equipment earlier than forecast to proactively deal with end of life and manage risk (+\$2 million);
- investment in collaboration tools to support our business through COVID-19 and ongoing requirements for hybrid working (\$1 million);
- the need to replace, rather than upgrade, our Transmission Billing System (+\$4 million);
- higher than forecast costs to deliver our OneERP program to replace the obsolete Dynamics AX system with SAP S/4HANA (+\$17 million); and
- additional requirements of the Maximo Business Process Redesign and Asset Data Integrity Improvement Program (\$2 million).

Though delivery of some projects was delayed across the period, by the end of AA5 we will have:

- completed Phase 1 of the OneERP program establishing a functional, fully supported, industry-standard system, including required upgrades to linked systems such as asset management, travel management and expense management;
- completed a business process redesign for our asset management system, and minor updates to several other critical applications such as BYDA, GIS X Info Aware and QDMS;
- transitioned our IT managed service providers and uplifted our IT operating model;
- completed/began the replacement of our Transmission Billing System; and
- established and delivered key foundational initiatives of our Cyber Security program including:
  - implementation of Identity and Access Management (IAM), Privileged Accounts Management (PAM), Managed Detection and Response (MDR), SIEM/SOAR and Vulnerability Management Solutions;
  - internal capability development – building a Cyber Security and Risk team to deliver cyber security operations, compliance and projects delivery capabilities;
  - development of our third-party risk management framework; and
  - initial data privacy and security capability development.

Our IT investment in AA5, by business case, is summarised in Table 2.12.

Table 2.12: Summary of IT investment in AA5 \$'000 December 2024

Project	BC#	App- roved	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Total	Variance
IT Sustaining Apps – OneERP	DBP21	<b>11,496</b>	10,833	2,821	14,530	-100	-	<b>28,084</b>	16,588
IT Sustaining Apps – Other	DBP21	<b>1,612</b>	218	236	368	453	160	<b>1,436</b>	-176
CRS/TBS	DBP20	<b>3,422</b>	309	117	307	2,929	3,840	<b>7,502</b>	4,080
IT Enabling	DBP22	-	1,021	-104	-	-	-	<b>917</b>	917
Cyber Security	DBP23	<b>2,847</b>	462	490	482	328	-	<b>1,762</b>	-1,085
IT Sustaining Infra	DBP30	<b>3,787</b>	342	877	444	1,144	2,947	<b>5,754</b>	1,967
Maximo and DMZ	DBP11	<b>2,761</b>	2,620	925	662	649	50	<b>4,905</b>	2,144
<b>Total</b>		<b>25,926</b>	<b>15,804</b>	<b>5,361</b>	<b>16,793</b>	<b>5,404</b>	<b>6,997</b>	<b>50,359</b>	<b>24,433</b>

We saw higher-than-expected investment required during AA5 across several of our IT initiatives driven by:

- COVID-19
  - Establishing tools to support our business to operate during lockdowns and restrictions, as well as supporting ongoing hybrid working requirements;
  - Delays to projects due to a tight labour market making it difficult to resource projects;
  - Project teams adjusting to remote working and having to employ different approaches where face-to-face meetings might have been used in the past to quickly resolve issues;
  - Loss of talent during project delivery, where resources returned to home countries for extended periods and could not continue to work on in AGIG's environment;
  - Time taken to get new resources up to speed when project is in delivery;
  - Purchase of IT hardware for existing and new employees to replicate their office functionality while working at home through COVID-19 and supporting hybrid working policies.
- Higher resource costs to be able to compete for appropriate skilled resources in a tight labour market;
- AGIG's strict FIRB obligations that require access to systems and data to be restricted to within Australia only has seen higher costs of project resourcing and development activities as these can only be undertaken by onshore resources, rather than a mix of onshore and offshore resources, at significantly higher comparative cost;
- A change from opex to capex associated with the change in approach to IT Sustaining Infrastructure;
- Greater than expected system changes required to achieve asset management business process redesign and modernised, fit-for-purpose customer billing; and

- An escalation in cyber security activity that required us to do more to be compliant and an increase in activity to keep systems and infrastructure upgraded and within support and required patch levels.

Table 2.13: Variance explanation by project \$'000 June 24

Project	AA5 App- roved	AA5 Fore- cast	Vari- ance	NGR Justification for overspend
IT Sustaining Apps – OneERP	11,496	28,084	16,588	<ul style="list-style-type: none"> <li>• 79(2) – The OneERP Phase 1 investment is necessary to maintain the integrity of services as per NGR 79(2)(c)(ii). SAP S/4 HANA is replacing the end-of-life Microsoft Dynamics AX platform and will support DBP's core finance and procurement activities.</li> <li>• 79(1) –               <ul style="list-style-type: none"> <li>• Prudent – the expenditure is necessary to complete the project and deliver a viable system to replace and address the risks of the underperforming Microsoft Dynamics AX system.</li> <li>• Efficient – Once it was clear the original estimate would not be sufficient, due to underestimation of internal effort, external market pressures impacting resource availability and costs, and issues with System Implementer, a full pause and re-baseline was undertaken. This included going back out to market for a new System Implementation partner to take the project forward, leading to an overall efficient outcome to move the project forward again.</li> <li>• Good industry practice – The adjusted expenditure will ensure the OneERP platform remains stable, fit-for-purpose and supported, in line with accepted good industry practice for core business applications.</li> <li>• Lowest sustainable cost – where possible we used existing resources and plans to reduce cost overhead and utilised our rigorous Commercial vendor and contract awards process to ensure value for money was optimised.</li> </ul> </li> </ul>
CRS /TBS	3,422	7,502	+4,080	<ul style="list-style-type: none"> <li>• 79(2) – maintaining a stable, mobile friendly platform for transmission billing, including support arrangements to ensure new business requirements can be met in a timely manner is necessary to maintain the integrity of services and to comply with regulatory obligations as per NGR 79(2)(c)(ii) and (iii). The transmission billing system is a key business tool that supports customer relationship management, billing and market reporting functions for DBP.</li> <li>• 79(1)               <ul style="list-style-type: none"> <li>• Prudent – expenditure necessary to address the identified ongoing operational and customer requirements for a stable, mobile friendly platform for transmission billing with the ability to make more timely functional improvements</li> <li>• Efficient – based on competitive procurement process. More efficient to address now than kick the can down the road.</li> <li>• Good industry practice – The proposed expenditure will ensure the transmission billing system remains stable, fit-for-purpose and supported, in line with accepted good industry practice for core business applications.</li> <li>• Lowest sustainable cost – Mobile access to a stable transmission billing with appropriate support to make timely configuration changes to meet business needs will improve the efficiency of customer relationship management, market</li> </ul> </li> </ul>

Project	AA5 Approved	AA5 Forecast	Variance	NGR Justification for overspend
				reporting and billing functions. We explored and ruled out potentially lower cost options of maintaining and enhancing the current CRS platform and determined they are no longer viable before proceeding with full replacement.
IT Enabling	0	917	+917	<ul style="list-style-type: none"> <li>79(2) – investment in collaboration tools to enable our business to operate effectively through COVID-19 lockdowns and ongoing flexible working arrangements was necessary to maintain the capacity to meet existing levels of demand for services as per NGR 79(2)(c)(iv). As a pipeline business, we have staff working across many locations, including our main offices in Perth and Jandakot, our compressor station sites, other remote sites and from their homes. Investment in collaboration tools has given our staff a similar working experience (and access to business applications and information) no matter where they are working – making it easier for them to do their job.</li> <li>79(1)           <ul style="list-style-type: none"> <li>Prudent – expenditure necessary to enable our business to operate effectively through COVID-19 pandemic and beyond.</li> <li>Efficient – utilising M365 licenses and integrating with other tools in our environment</li> <li>Good industry practice – Similar investments made across industry. We need to be able to run our business in a way that allows for flexible working to attract and compete for resources.</li> <li>Lowest sustainable cost – Where possible we utilised stock earmarked for decommissioning during Perth CBD office move as WFH equipment, and staged the use of Microsoft collaboration tools as we had no additional license costs to purchase.</li> </ul> </li> </ul>
Cyber Security	2,847	1,762	-1,085	<ul style="list-style-type: none"> <li>79(2) – investment in cyber security is necessary to maintain and improve the safety of services, maintain the integrity of services, and comply with regulatory obligations as per NGR 79(2)(c)(i)-(iii).</li> <li>79(1) –           <ul style="list-style-type: none"> <li>Prudent – We have kicked on with our cyber risk reduction program as much as we can. Some initiatives are dependent on other projects and therefore it has been prudent to delay these.</li> <li>Efficient – It is more efficient to delay and wait for dependent projects to be completed before undertaking the delayed initiatives, such as IAM, rather than a half implementation and rework once the dependent projects are finished.</li> <li>Good industry practice – What we have delivered still meets good industry practice. The SOCI requirements and minimum obligations were further defined when in Dec 2021, the SOCI Act was amended, followed by SOCI Rules in Apr 2022. Together these require us to ensure we have a risk management program that includes details of:               <ol style="list-style-type: none"> <li>a risk-based plan that outlines strategies and security controls as to how cyber and information security threats are being mitigated; and</li> <li>how we comply with Security Profile 1 of the AESCSF.</li> </ol> </li> <li>Lowest sustainable cost – we have built our internal capability and partnered with vendors (through competitive tendering</li> </ul> </li> </ul>

Project	AA5 App- roved	AA5 Fore- cast	Vari- ance	NGR Justification for overspend
				processes) to be able to deliver consistent and holistic cyber security capabilities ensuring lowest sustainable cost.
IT Sustaining Infra	3,787	5,754	+1,967	<ul style="list-style-type: none"> <li>• 79(2) – The additional expenditure is necessary to maintain IT assets which are integral to maintaining the safety, integrity and regulatory compliance of our services as per NGR 79(2)(c)(i)-(iii).</li> <li>• 79(1) –               <ul style="list-style-type: none"> <li>• Prudent – It is prudent to maintain currency of IT network and infrastructure assets, with the additional expenditure required compared to forecast due to a change in approach to consolidate AGIG’s data centre and cease its separate infrastructure as a service arrangement in each of the AGIG businesses.</li> <li>• Efficient – the works will be delivered efficiently by a mix of internal and external resources at competitively tendered rates.</li> <li>• Good industry practice – Proactive asset lifecycle management is good industry practice and AGN and MGN Victoria’s share of the program of works has recently been approved in the Victorian access arrangements.</li> <li>• Lowest sustainable cost – The infrastructure renewals are necessary to mitigate cyber security risks, and instability, which can result in costly service interruptions. Proactive replacement is typically also less expensive than reactive replacement and ensures business impacts of any changes or system outages can be appropriately managed which is consistent with lowest sustainable cost.</li> </ul> </li> </ul>
Maximo and DMZ	2,761	4,905	+2,144	<ul style="list-style-type: none"> <li>• 79(2) – The Maximo Business Process Redesign and Asset Data Integrity Improvement Program supports continuous improvement in asset management and is integral to continued delivery against our Safety Case. It is therefore required to maintain or improve safety, maintain integrity and comply with regulatory obligations as per NGR 79(2)(c)(i)-(iii).</li> <li>• 79(1) –               <ul style="list-style-type: none"> <li>• Prudent – Additional requirements were identified in the scope of work that were prudent to address alongside original scope and deliver right outcome for DBP asset management.</li> <li>• Good industry practice – It is good industry practice to ensure asset definitions and structures in the asset management system continue to accurately reflect assets in the field as they change overtime, and with changing business or regulatory needs.</li> <li>• Lowest sustainable cost – Achieves lowest sustainable cost by ensuring maintenance and replacement planning is based on accurate asset definitions, structures and requirements.</li> </ul> </li> </ul>
<b>Total</b>	<b>25,926</b>	<b>50,359</b>	<b>+24,443</b>	

The following sections outline AA5 actual performance versus allowance for each of the IT Business Cases.

## 2.5.1 IT Sustaining Applications – OneERP

In AA5, we have incurred higher costs on the sustaining applications program than anticipated. This is due to a combination of market conditions, increased system risks and business need. We have worked hard to reprioritise resources to focus on critical updates but have had to incur additional costs to reduce the risks to our customers of potential system failures. In summary, during AA5 we have, or expect to have:

- Delivered OneERP for DBP, including the move to SAP S/4 HANA for finance and procurement, implementing significant procurement improvements and upgrading other interconnected systems;
- Substantially completed the new Transmission Billing System project to replace the end-of-life Customer Reporting System;
- Completed the upgrade of Before You Dig Australia;
- Replaced our legacy knowledge management system QDMS with the more fit-for-purpose InEight knowledge management system;
- Update Maximo to version 7.6.1.3 to maintain it within vendor extended maintenance and facilitate a major upgrade to Maximo in the next regulatory period; and
- achieved efficiencies by transitioning to new and consolidating existing service providers for IT services across AGIG.

As a result, our recurrent expenditure during AA5 is expected to be around \$28 million, compared to the \$11 million originally forecast.

Table 2.14: Total OneERP approved allowance (\$'000 December 2024)

	2020	Total AA4	2021	2022	2023	2024	Total AA5	Total Project
Allowance	3,815	3,815	11,496	0	0	0	11,496	15,311
Actual	3,603	3,603	10,833	2,821	14,530	-100	28,084	31,687
<b>Variance</b>	<b>-212</b>	<b>-212</b>	<b>-664</b>	<b>2,821</b>	<b>14,530</b>	<b>-100</b>	<b>16,588</b>	<b>16,376</b>

### 2.5.1.1 Justification

A new enterprise resource planning (ERP) system (SAP S/4HANA).

DBP's approved allowance represented 66.5% of the total forecast cost of Phase 1 (the other 33.5% to be borne by AGN). The estimate represented the full cost of implementing the new ERP system and was developed via an exhaustive competitive tender process conducted March to August 2020.

At that time, the AGIG-wide One ERP program was expected to cost ~\$60.5 million. The estimated cost of implementing SAP at DBP alone (i.e. without the efficiencies of being part of the broader One ERP program) were stated to be \$17.7 million (\$Dec 2019).

Reasons for higher costs incurred:

- Underestimation of internal resource effort (we understand this to be common in ERP projects);
- COVID-19 impacts on project delivery timelines;
- Market tightening both in skilled resources in Australia (lower immigration rates etc), and in specialised SAP resources (driven by SAP roadmap and COVID-19 impacts);
- Cost pressures led to a project pause and restart in 2022 with new System Implementation partner; and

- Compared to other similar implementations, AGIG has strict FIRB obligations to restrict access to its systems and data from outside Australia. Full utilisation of onshore resources and development is significantly more expensive than the typical mix of onshore and offshore other implementations would employ.

## 2.5.2 IT Sustaining Applications – Other

Table 2.15: AA5/Project forecast actual versus approved (\$'000 December 2024)

IT Sustaining Apps - Other	2021	2022	2023	2024	2025	Total AA5
Allowance	690	393	203	123	203	1,612
Actual	218	236	368	453	160	1,436
<b>Variance</b>	<b>-472</b>	<b>-157</b>	<b>166</b>	<b>330</b>	<b>-43</b>	<b>-176</b>

### 2.5.2.1 Justification

Slightly lower upgrade requirements/costs across some systems.

Table 2.16: IT Sustaining Applications – Other, AA5 breakdown by initiative, \$'000 December 2024

Project Name	Total AA5 App- roved	2021	2022	2023	2024	2025	Total	Variance
Maximo Upgrade	208	-	-	-	172	-	<b>172</b>	<b>-36</b>
SAP Success Factors - LMS	-	-	-	111	-	-	<b>111</b>	<b>111</b>
Other Core Systems	766	218	-	290	80	140	<b>729</b>	<b>-37</b>
Customer Support/Service Desk	152	-	109	-	-	-	<b>109</b>	<b>-43</b>
CRS system upgrade	115	-	-	-	-	-	-	<b>-115</b>
IT Program & Change Management	372	-	127	-33	30	20	<b>144</b>	<b>-228</b>
Travel Management Transition	-	-	-	-	171	-	<b>171</b>	<b>171</b>
<b>Total</b>	<b>1,612</b>	<b>218</b>	<b>236</b>	<b>368</b>	<b>453</b>	<b>160</b>	<b>1,436</b>	<b>-176</b>

## 2.5.3 CRS

Table 2.17: AA5/Project forecast actual versus approved (\$'000 December 2024)

CRS	2021	2022	2023	2024	2025	Total AA5
Allowance	737	306	184	2,010	185	3,422

Actual	309	117	307	2,929	3,840	7,502
Variance	-428	-189	123	918	3,655	4,080

**2.5.3.1 Justification**

CRS and associated billing process are arguably the most important processes in our business, storing confidential customer information, processing gas measurement data, managing and delivering over \$37 million in revenue per month for DBP and AGID assets.

CRS uses outdated and unsupported technology and requires extensive manual workarounds. In its current state, the system presents both a stability and cyber-security risk, lacks full auditability and does not meet requirements for reporting customer and revenue data.

[Redacted]

[Redacted]

[Redacted]

The remaining long-term solution was to restart with a Transmission Billing System (TBS) replacement for CRS. This represents a significant change in identified scope and time compared to AA5 proposed/approved submission.

In March 2024, management and the DBP Board endorsed a proposal to award the design, construction, configuration, and commissioning of the EnergySys platform to Elite Energy Consultants. We are approximately 6 months into the project and well into development of the solution design.

The Energysys platform provides the business with a robust and secure solution which is easy to maintain. The solution configuration requires no program coding and therefore small to medium changes and enhancements can be undertaken by AGIG resources. The EnergySys platform is used by several large oil and gas companies around the world, including Santos, BP, and First Gas (NZ). It uses cloud – based technology and has a demonstrated high level of reliability. The platform itself is regularly upgraded, enhanced, and tested as part of the subscription fees.



The total cost of the project to implement the EnergySys platform is forecast to be \$8.7 million with an estimated 18 month to two-year delivery timeframe. We are confident our procurement approach has achieved most efficient market cost for a billing solution that will support our business for years to come. Not undertaking the replacement now would have simply delayed the inevitable, increased the risk of instability, required the continuation of manual workarounds and continued to fail to meet the expectations of our customers.

In 2021, 2022 and 2023 an investment of \$400k was made for enhancements to CRS including:

- 2021: \$150k for mCloud to develop the functional design specification to map out requirements for a replacement system and develop a scope statement.
- 2021: Business process mapping, root cause of issues with CRS.
- 2022 and 2023 – Billing enhancements to CRS to correct billing for some services and fees that were not being done correctly by CRS

## 2.5.4 IT Enabling

Table 2.18: IT Enabling AA5 Actuals (\$000 December 2024)

IT Enabling	2021	2022	Total
Approved	-	-	-
Actual	1,021	-104	917
<b>Variance</b>	<b>1,021</b>	<b>-104</b>	<b>917</b>

### 2.5.4.1 Justification

ERA did not accept IT Enabling program of Business Intelligence, Data Management and Analytics and Digital Transformation.

Following the COVID-19 pandemic and ensuing changes in the way we work, we were required to invest \$0.9 million in rolling out new communication and collaboration tools for our business. This ensured we could continue to work effectively and support safe and reliable delivery of services to our customers. Cyber Security

Table 2.19: AA5/Project forecast actual versus approved (\$000 December 2024)

Cyber Security	2021	2022	2023	2024	2025	Total AA5
Allowance	1,535	549	564	200	-	2,847
Actual	462	490	482	328	-	1,762
<b>Variance</b>	<b>-1,072</b>	<b>-58</b>	<b>-83</b>	<b>129</b>	<b>-</b>	<b>-1,085</b>

### 2.5.4.2 Justification

\$2.8 million capex toward AGIG’s Uplift in Cyber Capabilities program to achieve MIL 3 as soon as reasonably practicable.

We have completed the following activities during AA5:

- Implementation of: Identity and Access Management (IAM), Privileged Accounts Management (PAM), Managed Detection and Response (MDR), SIEM/SOAR and Vulnerability Management Solutions;

- internal capability development – building a Cyber Security and Risk team to deliver cyber security operations, compliance and projects delivery capabilities;
- development of our third-party risk management framework; and
- initial data privacy and security capability development
- There are also \$0.5m of Operational Technology cyber activities which have been captured under the SCADA BC.

The bulk of the underspend during AA5 occurred in 2021 when the AGIG Cyber Security capability was being more fully established. Expenditure beyond 2021 was broadly in line with forecast.

## 2.5.5 IT Sustaining Infrastructure

Table 2.20: AA5/Project forecast actual versus approved (\$'000 December 2024)

IT Sustaining Infrastructure	2021	2022	2023	2024	2025	Total AA5
Allowance	527	789	499	792	1,179	3,787
Actual	342	877	444	1,144	2,947	5,754
<b>Variance</b>	<b>-185</b>	<b>88</b>	<b>-55</b>	<b>352</b>	<b>1,768</b>	<b>1,967</b>

### 2.5.5.1 Justification

Additional costs driven by refresh requirements for Data Centre Consolidation, which is a change in approach to own and share Infrastructure across AGIG (and remove DBP's Infra as a service – need to show BC/NPV for this), as well as key AGIG infrastructure projects (AD Consolidation, OS Currency, etc)

Table 2.21: IT Sustaining Infrastructure, AA5 breakdown by initiative, \$'000 December 2024

Workstream	AA5 Project Name	AA6 Project Name	Total AA5 Allowance	2021 Actual	2022 Actual	2023 Actual	2024 A+F	2025 Forecast	Total	Variance
End user devices	Annual IT Asset Renewal	End User Devices	2,449	297	567	423	384	947	2,619	171
Network and currency	Network and currency		698	46	-	24	-	616	686	-12
	Citrix Virtual Servers Upgrade	Citrix Virtual Servers	638	-	314	-	260	-	574	-64
Data centre	Data Centre Infrastructure	Data Centre Appliances	-	-	-	-	500	1,384	1,884	1,884
<b>Total</b>			<b>3,784</b>	<b>344</b>	<b>882</b>	<b>447</b>	<b>1,144</b>	<b>2,947</b>	<b>5,763</b>	<b>1,979</b>

## 2.5.6 Maximo and DMZ

Table 2.22: AA5/Project forecast actual versus approved (\$'000 December 2024)

Maximo and DMZ	2021	2022	2023	2024	2025	Total AA5
Allowance	1,827	190	190	363	191	2,761

Actual	2,620	925	662	649	50	4,905
<b>Variance</b>	<b>793</b>	<b>735</b>	<b>472</b>	<b>286</b>	<b>-141</b>	<b>2,144</b>

### 2.5.6.1 Justification

Primarily additional requirements of the Maximo Business Process Redesign and Asset Data Integrity Improvement Program (which was an extension of process redesign work) - \$1.85m or 134% uplift in costs.

Also \$0.2m or 120% uplift in CSN costs.

Table 2.23: Maximo and DMZ, AA5 breakdown by initiative, \$'000 December 2024

Project Name	Total AA5 Allowance	2021 Actual	2022 Actual	2023 Forecast	2024 Budget	2025 Budget	Total	Variance
CSN Cisco Firewall and Server Replacement	196	429	-	-	-	-	<b>429</b>	<b>233</b>
DMZ upgrade	626	277	126	-11	207	50	<b>648</b>	<b>23</b>
Maximo Configuration and Upgrade	1,424	1,914	348	697	443	-	<b>3,401</b>	<b>1,978</b>
Asset Data Integrity Improvement Program	0	-	451	-24	-1	-	<b>426</b>	<b>426</b>
Maximo annual patching	513	-	-	-	-	-	-	513
<b>Total</b>	<b>2,744</b>	<b>2,604</b>	<b>919</b>	<b>658</b>	<b>382</b>	<b>155</b>	<b>4,718</b>	<b>1,974</b>

## 2.6 Summary of AA5 Operating Expenditure

We forecast to spend \$31 million operating our IT in AA5. This is an uplift of \$5 million (or 21%) compared to the \$26 million forecasts.

The 2024 base year forecast IT opex is \$8 million. This is an uplift of \$2 million (or 44%) compared to the \$5 million forecast. The key drivers of uplift are:

- OneERP licencing, infrastructure as a service and managed support costs of +\$1.9 million pa;
- Uplift in cyber security licencing and managed services costs of +\$0.3 million pa;
- Reduction in Infrastructure as a Service -\$0.8 million pa;
- Service Desk managed services costs of \$0.7 million; and
- Other licence growth +\$0.1 million.

### 3 Consistency with the NGL and NGR

Our networks are operated in accordance with the National Gas Law (NGL) and NGR. The overarching objective of the NGL is set out in the National Gas Objective (NGO), which states that the objective of the NGL is to “*promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply*”.

Our proposed investment in AA6 is consistent with this objective because it will enable us to maintain and prudently extend our IT systems and business processes in a manner that will ensure the ongoing safety, reliability and security of supply is managed in a cost-effective way, which is in the long-term interests of consumers.

The proposed expenditure also complies with the NGR.

It is compliant with the new capex criteria in rule 79 of the NGR because it is:

- such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice to achieve the lowest sustainable cost of providing services (rule 79(1)(a)); and
- Justifiable under rule because the proposed programs and projects are necessary to maintain and improve the safety of services, maintain the integrity of services or to comply with a regulatory obligation or requirement (rule 79(2)(c)(i)-(iv)) as described in the table below.

Table 3.1: Consistency of the proposed IT program with rule 79(2)(c) of the NGR

#	NGR criteria	Justification of the proposed expenditure
<b>79(2)(c)</b>	<b>The capital expenditure is necessary:</b>	
(ii)	to maintain the integrity of services	<p>IT Sustaining Applications – The proposed expenditure on our IT sustaining applications project is required to maintain the integrity of services through current, supported and fit for purpose IT applications, managing technology risks and preventing material outages that impact the ability of the business to function (including tracking and reporting of business information to meet our regulatory obligations and requirements). Therefore this expenditure is consistent with NGR 79(2)(c)(ii) and (iii).</p> <p>Cyber Security – The proposed expenditure on Cyber Security is required to maintain the integrity of services through Cyber Security controls commensurate with the cyber risk we face and is therefore consistent with NGR 79(2)(c)(ii).</p> <p>All IT systems and technology infrastructure are exposed to cyber threats. The confidentiality, integrity and availability of information and information technology systems is critical to ensure the business is able to deliver its services effectively and in line with its various regulatory obligations and requirements, such as Critical Infrastructure Act, Privacy Act and FIRB reporting obligations. This requires investment to ensure our systems are secure and remain resilient to external threats.</p> <p>IT Sustaining Infrastructure – The proposed expenditure on our IT sustaining infrastructure project is required to maintain the integrity of services through current, supported and fit for purpose IT infrastructure, managing technology risks and preventing material outages that impact the ability of the business to function (including tracking and reporting of business information to meet our regulatory</p>

#	NGR criteria	Justification of the proposed expenditure
<b>79(2)(c)</b>	<b>The capital expenditure is necessary:</b>	
		obligations and requirements). Therefore this expenditure is consistent with NGR 79(2)(c)(ii) and (iii).
(iii)	to comply with a regulatory obligation or requirement	<p>IT Sustaining Applications – The proposed expenditure on our IT sustaining applications project is required to maintain the integrity of services through current, supported and fit for purpose IT applications, managing technology risks and preventing material outages that impact the ability of the business to function (including tracking and reporting of business information to meet our regulatory obligations and requirements). Therefore this expenditure is consistent with NGR 79(2)(c)(ii) and (iii).</p> <p>IT Sustaining Infrastructure – The proposed expenditure on our IT sustaining infrastructure project is required to maintain the integrity of services through current, supported and fit for purpose IT infrastructure, managing technology risks and preventing material outages that impact the ability of the business to function (including tracking and reporting of business information to meet our regulatory obligations and requirements). Therefore this expenditure is consistent with NGR 79(2)(c)(ii) and (iii).</p>

Forecast costs are based on the latest market rate testing and reflect the lifecycle management and estimation approach described in the following sections. The estimate has therefore been arrived at on a reasonable basis and represents the best estimate possible in the circumstances.

### 3.1 Project management and application lifecycle methodologies

We utilise an industry standard business and technology project management methodology, which is managed through formal governance. This methodology divides the projects into key stages – concept, develop, plan, deliver and close. Each stage consists of key tasks and activities to ensure consistency and standardisation across projects. The project methodology provides a consistent, standard and quality assured project implementation framework, ensuring that the work is carried out in a prudent and efficient manner.

The IT project management methodology is provided in Appendix B.

We also follow an industry standard application lifecycle framework to manage applications through the implementation, operations, optimisation and retirement phases of their lifecycle. This framework provides an efficient and effective approach to maintaining the security and stability of the applications while optimising lifecycle stages. This framework includes the project management methodologies to implement the applications, and ongoing lifecycle activities to operate and optimise the applications - including upgrade cycles.

The application lifecycle management framework is provided in Appendix C.

### 3.2 Estimation approach and cost allocation

To ensure project estimates are developed in a consistent manner, we use an estimation tool (aligned with the project methodology) to forecast the work effort and cost estimates for all projects included in this IT investment plan. The tool uses actual values from recent years for resource work

effort estimates, with all actual values used being sanity checked to ensure any changes to the way historical projects were carried out are considered.

The material and direct labour costs, and applicable planning, design and commissioning charges, are based on historical actual costs of similar projects and on vendor quotes that are subject to a competitive tendering process<sup>3</sup>. This assumes the use of an efficient combination of internal and external resources to deliver each project.



The historical values and work effort estimates are then used as inputs into the final estimates, which are subject to stringent review and endorsement by members of the Portfolio Management Office and Portfolio Governance Committee. The work effort, cost and timing of projects are monitored throughout the project lifecycle to ensure on time and on budget delivery. Further information on this governance process is provided in Appendix B.


For AGIG wide projects, once the total project cost has been determined, the forecast costs are then allocated to the businesses that use/benefit from each system on the most appropriate basis available, typically revenue or FTEs.

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<sup>3</sup> in accordance with the AGIG Procurement policy and guidelines - available upon request.

## Appendix A: Strategic objectives by project

	Application upgrades and enhancements	Network and currency projects	End user device refresh	Data centre projects	Field connectivity	Cyber currency	Cyber uplift
<p><b>Delivering for customers</b></p> 	<p>Delivering upgrades and application enhancements on a risk-based assessment of business need will deliver the right projects, the right way at the right time and ensure we maintain secure and resilient systems.</p>	<p>The 'AGIG One IT' approach to infrastructure refresh will deliver the right way at the right time and ensure we maintain secure and resilient systems.</p>	-	-	<p>Field connectivity to utilise mobility features of our core business systems will ensure we deliver the right projects, the right way at the right time.</p>	<p>Cyber currency will ensure we maintain secure and resilient systems.</p>	<p>Uplifting cyber maturity to address key identified risks will ensure we deliver the right projects, the right way at the right time and maintain secure and resilient systems.</p>
<p><b>A good employer</b></p> 	<p>Delivering upgrades and application enhancements on a risk-based assessment of business need will equip AGIG teams with systems and enable them to be their best.</p>	<p>The 'AGIG One IT' approach to infrastructure refresh will equip AGIG teams with systems and enable them to be their best.</p>	<p>The conservative refresh of end user devices will equip AGIG teams with systems and enable them to be their best.</p>	-	<p>Field connectivity to utilise mobility features of our core business systems will equip AGIG teams with systems and enable them to be their best and continually evolve the IT operating model, culture and improve business partnering.</p>	<p>Cyber currency will equip AGIG teams with systems and enable them to be their best.</p>	<p>Uplifting cyber maturity to address key identified risks will continually evolve the IT operating model and culture.</p>

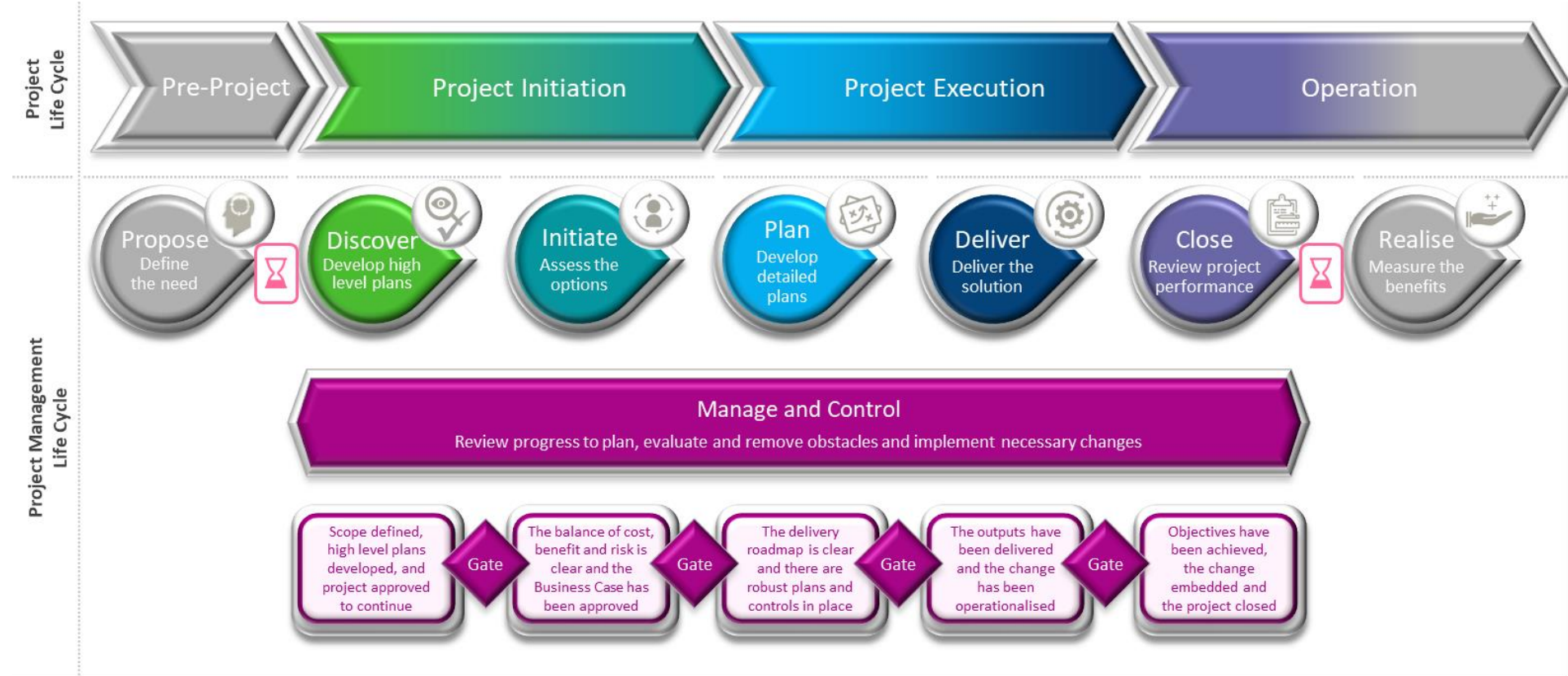
	Application upgrades and enhancements	Network and currency projects	End user device refresh	Data centre projects	Field connectivity	Cyber currency	Cyber uplift
<p><b>Sustainably cost efficient</b></p> 	<p>Delivering upgrades and application enhancements on a risk-based assessment of business need will enable and shape the technology future and support collaboration with service partners to achieve business outcomes.</p>	<p>The 'AGIG One IT' approach to infrastructure refresh will enable and shape the technology future.</p>	<p>The conservative refresh of end user devices will enable and shape the technology future.</p>	<p>The organic transition to cloud will continue building foundations to enable and shape the technology future.</p>	-	<p>Cyber currency will enable and shape the technology future.</p>	<p>Uplifting cyber maturity to address key identified risks will enable and shape the technology future.</p>



## Appendix B: IT project management methodology

### B1: Project Management Methodology

To manage all its IT projects, AGIG utilises an industry standard business and technology project management methodology, which is managed through formal governance. The project management methodology covers the full project lifecycle. The interaction between the project and project management lifecycle is illustrated in the figure below.



The key aspects of the project management methodology are outlined in the diagrams below. Projects are classified as Tier 1, 2, 3 or 4, depending on their size, risk and complexity (Tier 1 being large, complex and high risk projects through to Tier 4 which are small, simple and low risk projects).

The project management methodology applied to the project varies according to its classification. This ensures the level of structure and discipline applied to the project is fit for purpose (i.e. complex, high risk and expensive projects require strong levels of discipline and rigour to ensure project success, whereas less complex projects can scale back the level of structure to align to their the size, complexity and risk).

The delivery, governance and approvals for Tier 1 Complex Projects is depicted below. Tier 2, 3 and 4 projects adopt all relevant delivery, governance and approval steps from Tier 1 as is appropriate for their size, risk and complexity. i.e. Tier 2 has slightly less requirements than Tier 1, Tier 3 less again and so on.

## IT PMO | Tier 1 Complex Projects - Delivery

Project Category	All Tiers	Tier 1 (Complex)					All Tiers	
Responsible	Bus Engagement / Sponsor	PMO / Embedded Project Managers					Project Sponsor	
Stage	Project Life Cycle	Pre-Project	Project Start Up		Project Execution		Post-Project	
Phase	Project Management Life Cycle	<b>Propose</b> Define the need and validate and prioritise the project	<b>Discover</b> Define the scope, develop high level plans and seek approval to continue	<b>Initiate</b> Identify, assess and select solutions and seek approval to commence	<b>Plan</b> Define the detailed solution and develop robust plans to deliver	<b>Deliver (Iterative)</b> Develop, accept and deploy the solution and complete warranty period	<b>Close</b> Hand over benefits, finalise project activities and disband the team	<b>Realise</b> Embed the change, utilise the capability and measure the benefits
Project Delivery	Project Management	Project Classification Tool Develop Indicative Resource Plan Develop Indicative Estimate Develop BNS	Project Management Plan (Initial) High Level Project Requirements Specification High Level Project Scope Statement Establish Steering Committee Establish Working Group Create Project Register Commence Project Reporting Create Project Deliverables Register <i>Where Initiate requires 3rd party input:</i> - Detailed Scope Statement for Initiate - Select 3rd party Detailed Estimate for Initiate High Level Schedule High Level Resource Plan High Level Estimate for Execution Develop & Approve Preliminary Business Case Create project budget Complete Discover Stage Gate Assessment	<i>Where Initiate requires 3rd party input:</i> - Appoint 3rd party - Kick-off - Create Vendor Deliverables Register - Manage 3rd Party Detailed Scope Statement Detailed Requirements Specification High Level Design & Approval High Level Business Process Design Risk Workshop Stakeholder Assessment Change Impact & Complexity Assessment Define the Change Project Management Plan (Revised) Refined Schedule Refined Resource Plan Detailed Benefits Plan Detailed Estimate for Execution <i>Where Execution requires a Partner:</i> - Select Execution partner Develop & Approve Detailed Business Case Update project budget Complete Initiate Stage Gate Assessment	Baseline the Project <i>Where Execution requires a partner:</i> - Appoint partner - Establish Joint Governance Forum - Create Vendor Deliverables Register - Manage Vendor Project Kick-off (including partner) Detailed Design & Approval Requirements Traceability Matrix Detailed Business Process Design Project Management Plan (Revised) Draft Change and Comms Plan Master Training Plan Master Test Plan Implementation Plan Transition Plan Detailed Schedule Detailed Resource Plan Detailed Quote Validate the Business Case Re-baseline the Project (if required) Complete Plan Stage Gate Assessment	Manage Project to Baseline Manage Risks and Issues Manage Stakeholders Project Management Plan (Revised) Detailed Change and Comms Plan Detailed Training Plan Detailed Test Plan Detailed Implementation Plan Detailed Transition Plan Develop and Deliver Training Material Test Reports Readiness Assessment Report Approvals / Go No-go Report Transition to Support Docs Business Process Documents Develop & Approve Project Chg Req (as applic) Complete / Exit Hypercare Complete Deliver Stage Gate Assessment	Post Implementation Review Identify Lessons Learnt Hand over benefits tracking Finalise / Archive Documentation Reconcile and Finalise Financials Close GL / Project Code Close / Transfer Risks and Issues Develop & Approve PIR & Closure Report Release Resources Complete Close Stage Gate Assessment	
		Report project progress (Project Status Report) Manage Project Management Deliverables (Project Deliverables Register) Log actions, decision, lessons, risks, issues, assumptions, dependencies etc. (Project Register) Manage Initiate and Execute partner/s if applicable (Vendor Deliverables Reg)						

# IT PMO | Tier 1 Complex Projects – Governance and Approvals

Project Category		All Tiers	Tier 1 (Complex)					All Tiers
Responsible		Bus Engagement / Sponsor	PMO / Embedded Project Managers					Project Sponsor
Stage	Project Life Cycle	Pre-Project	Project Start Up		Project Execution			Post-Project
Phase	Project Management Life Cycle	<b>Propose</b> Define the need and validate and prioritise the project	<b>Discover</b> Define the scope, develop high level plans and seek approval to continue	<b>Initiate</b> Identify, assess and select solutions and seek approval to commence	<b>Plan</b> Define the detailed solution and develop robust plans to deliver	<b>Deliver (Iterative)</b> Develop, accept and deploy the solution and complete warranty period	<b>Close</b> Hand over benefits, finalise project activities and disband the team	<b>Realise</b> Embed the change, utilise the capability and measure the benefits
Approvals	Approval Artefact	<b>Business Need Statement</b> Discover (inc funding for Discover partner if app) N/A Project Sponsor (Bus) / CIO (IT) Per DFA	<b>Preliminary Business Case</b> Initiate Stakeholders, Steering Committee CIO and Exec Sponsor Per DFA	<b>Detailed Business Case</b> Execute (Plan, Deliver, Close) Stakeholders, Steering Committee CIO, Exec Sponsor and ELT Per DFA	<b>Business Case Validation (if applicable)</b> Execute (Plan, Deliver Close) Stakeholders, Steering Committee CIO, Exec Sponsor and ELT Per DFA	<b>Project Change Request (as applicable)</b> Execute (Plan, Deliver Close) Stakeholders, Steering Committee CIO, Exec Sponsor and ELT Per DFA	<b>Closure Report</b> N/A Stakeholders, Steering Committee CIO and Exec Sponsor N/A	<b>Benefits Realisation Report</b> N/A N/A Exec Sponsor N/A
Governance	PMO Oversight Methodology	Required Tier 1 ELT or SLT Member Steering Committee and Joint Governance Committee (for 3rd Party Implementation Partners) Required (PMO or Embedded PM) Required Required Required Required Monthly						

## B2: Project approvals

### Executive management support and program and project governance

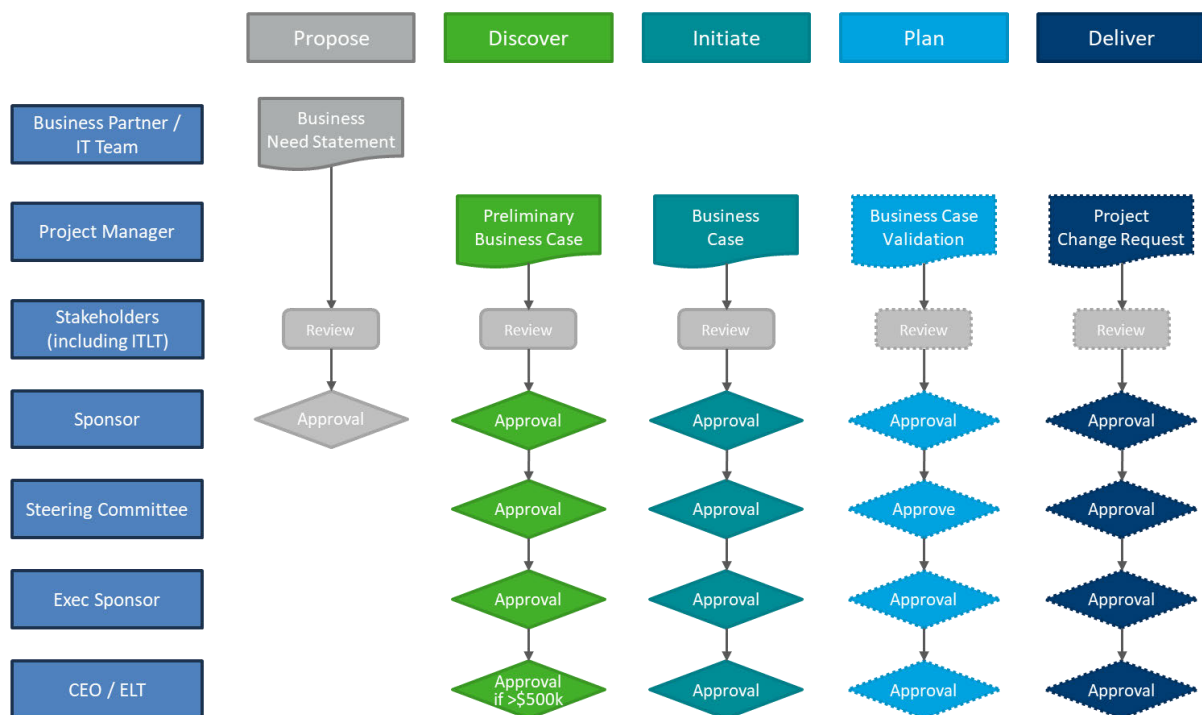
As will be seen from the composition of the various governance forums below, the most senior people in DBP, from Board members to the CEO to Executive Leadership Team members, are involved in approving and monitoring IT projects.

The following mandatory review and assessment points exist within the governance framework:

- 1 Formal approval by an independent governance forum, e.g. the DBP Board or the Portfolio Governance Committee, depending on the size of the project.
- 2 Stage gate assessment of key deliverables, schedules and processes.
- 3 Risk assessment in each stage.
- 4 Progress review by Project Steering Committee (at least monthly).
- 5 Ongoing review of business case, to ensure benefits are still attainable.
- 6 Spot-check quality assurance assessments.
- 7 Formal user acceptance testing and sign-off.
- 8 Closure reports
- 9 Post implementation reviews identifying lessons learned and enhancing the corporate methodology.

The approval flow for a Tier 1 project is depicted below.

### IT PMO | Approval Flow: Tier 1



Note: All approvals are subject to AGIG's DFA process to execute financial expenditure

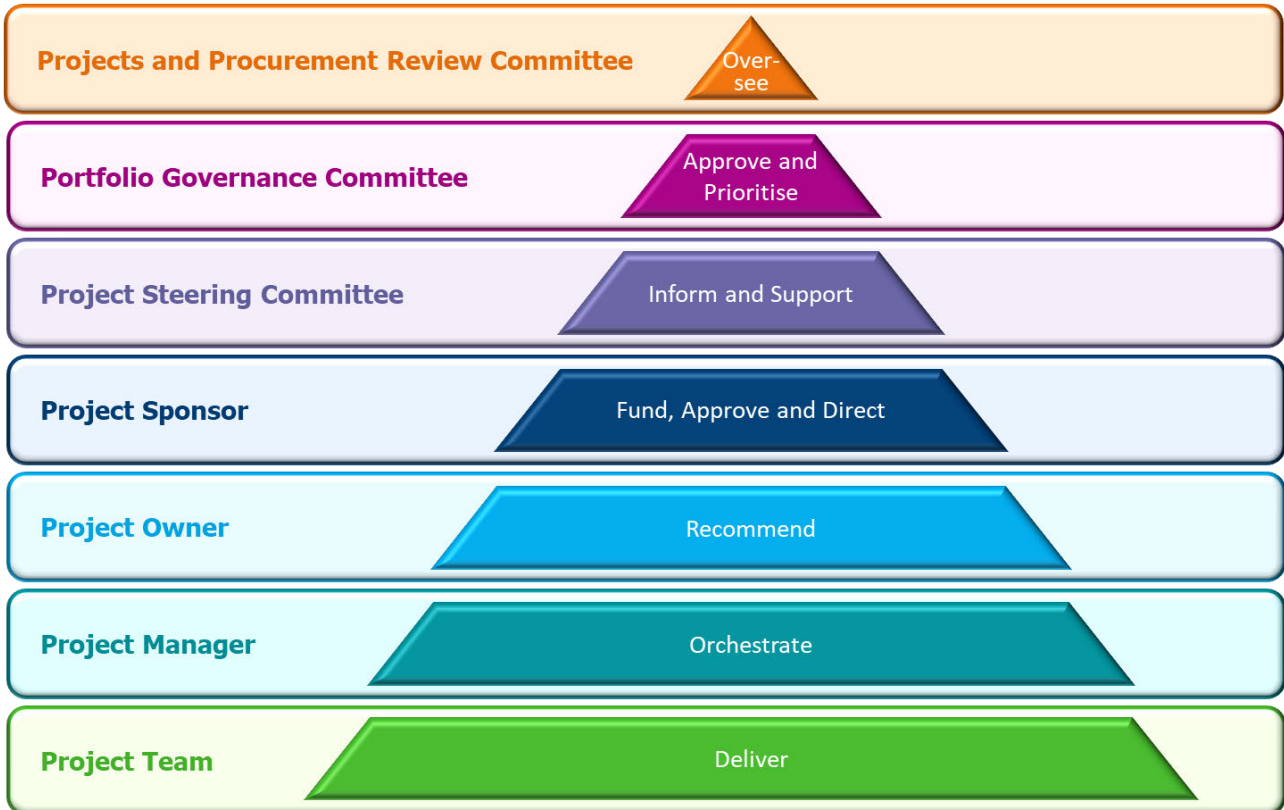
## IT project governance structure

The IT project governance structure ensures the projects undertaken are the most appropriate, support the business and IT strategy and provide business benefits and risk mitigation.

The governance structure is scaled to ensure approvals occur at the right level of the organisation, and smaller projects are not unnecessarily burdened with onerous governance processes.

Progress against the IT portfolio of projects is reported monthly to the Projects and Portfolio Review Committee.

The Portfolio Governance Structure and Key Roles are depicted below.



## B3: Project governance

Any projects that have an expected end-to-end budget of over a policy-agreed amount must be approved at DBP Board level.

### Executive Leadership Team

The Executive Leadership Team consists of the executives and the chief executive officer. The ELT provides strategic direction and facilitates decision making regarding IT. All large, complex and high value IT projects must be approved by the ELT.

.Project and Procurement Review Committee

The Project and Procurement Review Committee provides oversight on all ongoing capital projects including IT projects.

## IT Portfolio Governance Committee

The IT Portfolio Governance Committee provides the framework, functions and processes that guide IT's portfolio management activities. The committee seeks to optimise investments and meet organisational strategic and operational goals with an acceptable level of risk.

The committee acts as the progress review committee for IT projects approved to be delivered in the current budget period and are responsible for:

- endorsing all new projects;
- endorsing all requests to the Executive Leadership Team;
- ensuring project alignment with strategic objectives;
- the governance of all projects and initiatives; monitoring overall spend/savings, benefits, project health and dependencies;
- monitoring overall risks;
- starting and stopping projects/initiatives; and
- identifying productivity and business improvement opportunities, including the leverage of initiatives across the business, and drives out best practice initiatives

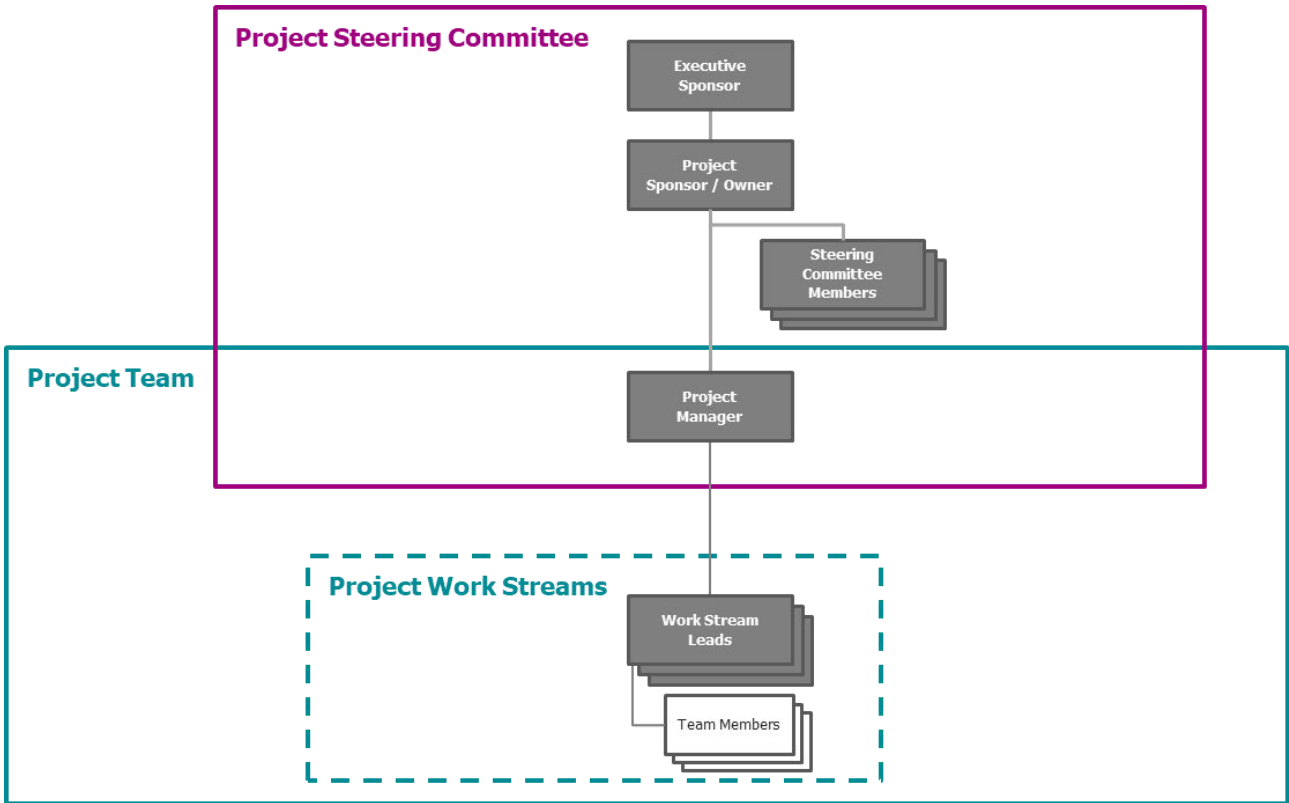
## Project Steering Committee

The Project Steering Committee (PSC) comprises relevant senior stakeholders from DBP/AGIG who oversee delivery of a single, specific project. The PSC tracks the project's progress and guide its direction, to ensure it is in line with strategic objectives and is delivering according to agreed business need, priority, objectives, benefits and success criteria.

The Committee:

- Provide steerage, consider alternatives and make recommendations as appropriate on behalf of their business
- Approve recommendations that impact project implementation, obtaining approval from portfolio delivery Governance (if required)
- Provide strategic guidance on all key project deliverables
- Resolve key risks and issues escalated by the project working group
- Ensure lessons learned from previous relevant programs are applied to scoping of current program any new lessons are shared at the end of program
- Provide regular updates on the project to their respective Leadership Team member
- Support updates to the IT Portfolio Governance Committee and Project and Procurement Review Committee as necessary

The relationship between the Project Steering Committee and the Project Team is depicted below:

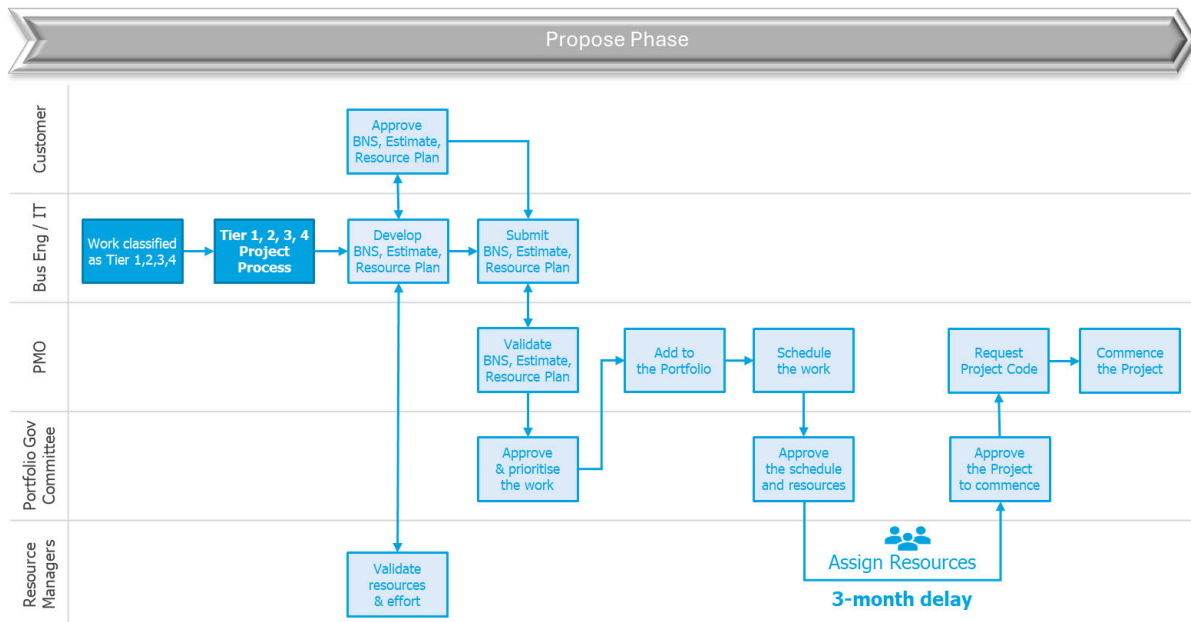


## Project initiation and approval

The following diagram illustrates the project initiation and approval process.

## Project Process

Projects are approved and prioritised by PGC, then scheduled according to priority. Projects will be scheduled 3 months in advance to ensure resource availability.



## B4: Good industry practice project management methodology

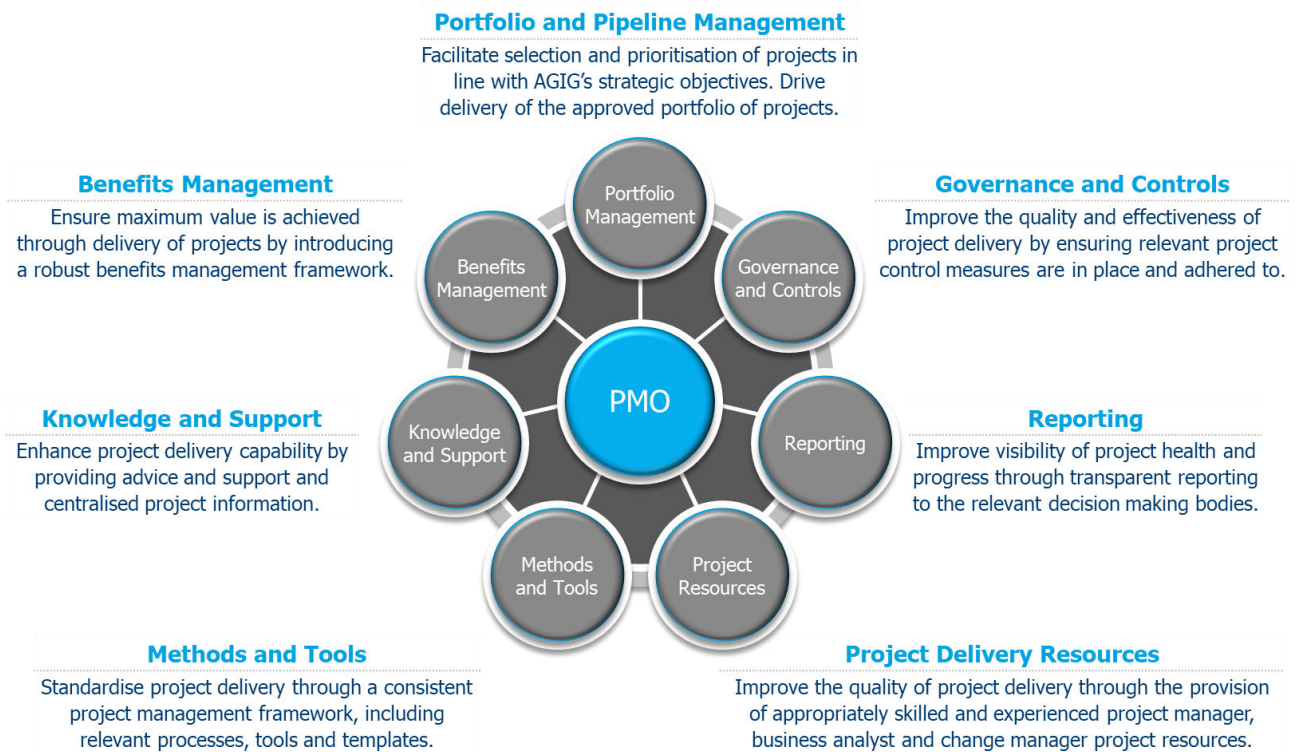
An organisational-wide project management framework underpins the program delivery. Risk assessments are required as part of the business case development and are revisited at each stage of the project to ensure changes in the project, the business operating environment and/or the regulatory environment are always considered and addressed. This overall approach is supported by three core frameworks:

- The Project Management Framework (PMF) - providing a consistent and scalable approach to project management including artefacts and processes.
- The Change Management Framework (CMF) – providing guidance for the activities and artefacts required for change at each stage of the project lifecycle.
- The Project Assurance Framework (PAF) - providing guidance for health checks, stage gate reviews and post implementations reviews.
- The Portfolio Management Office (PMO) – facilitating delivery of the right projects with material technology impact, at the right time, in the right way.
- The Project team roles and responsibilities -

### Portfolio Management Office (PMO)

The PMO exists to enable AGIG to achieve its strategic vision to deliver infrastructure essential to a sustainable energy future. It does this by facilitating delivery of the right projects with material technology impact, at the right time, in the right way.

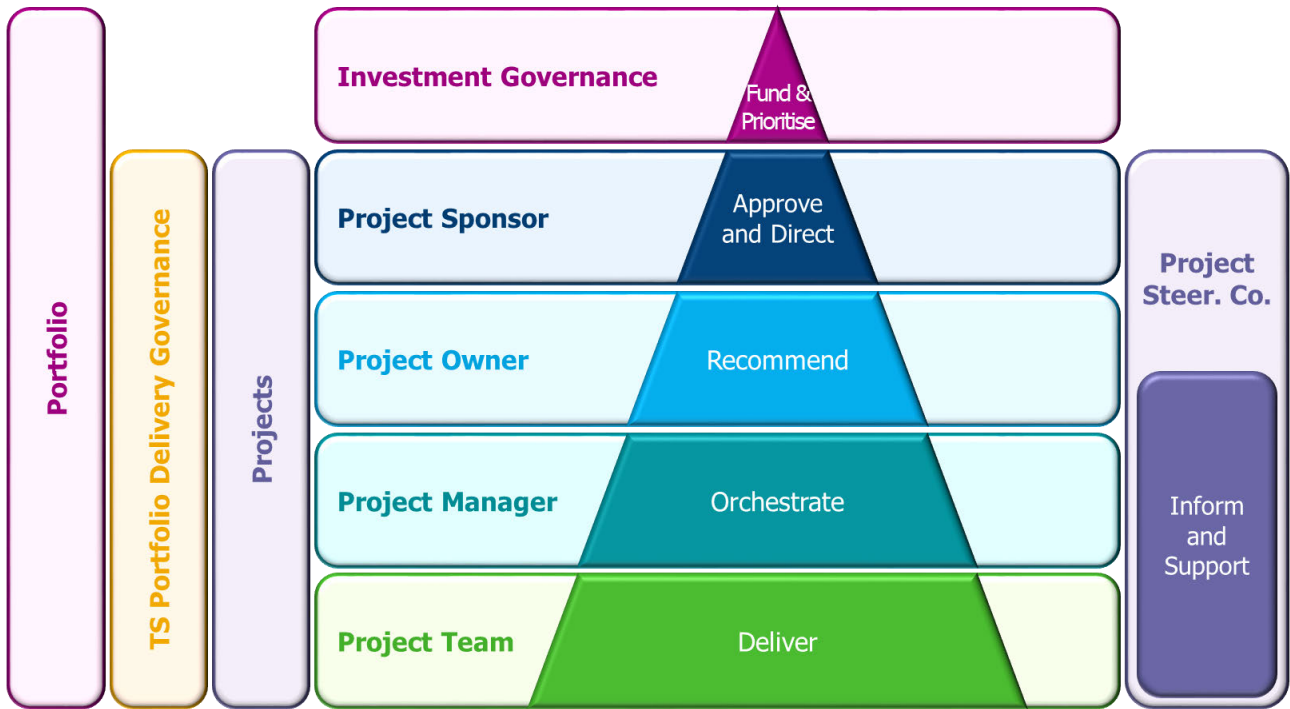
A summary of the PMO’s functions and responsibilities is provided in the diagram below:





## Project team roles and responsibilities

The project team roles and responsibilities are clearly defined and can be summarised as follows:



Role	Purpose	Key responsibilities
Project Sponsor	Accountability for, and senior leadership of, the project	<ul style="list-style-type: none"> <li>• One and one only per project</li> <li>• Accountable for project success</li> <li>• Creates the vision</li> <li>• Defines success</li> <li>• Owns the Business Case</li> <li>• Advocates the change</li> <li>• Makes strategic decisions*</li> <li>• Provides strategic direction</li> <li>• Removes escalated obstacles</li> <li>• Reviews progress</li> <li>• Sells the idea</li> <li>• Enforces project management principles and methodologies</li> <li>• Owns project performance</li> </ul>

Role	Purpose	Key responsibilities
Project Owner	Prime responsibility for project success	<ul style="list-style-type: none"> <li>• One per project</li> <li>• Responsible for benefits delivery</li> <li>• Defines the business objectives</li> <li>• Defines the business outcomes</li> <li>• Owns the outcomes and benefits</li> <li>• Leads the change</li> <li>• Makes tactical decisions*</li> <li>• Drives project success</li> <li>• Escalates items for Sponsor decision</li> <li>• Monitors progress</li> <li>• Engages stakeholders</li> <li>• Reinforces project management principles and methodologies</li> <li>• Communicates project performance</li> </ul>
Project Manager	Orchestrates all aspects of end to end project delivery	<ul style="list-style-type: none"> <li>• One per project</li> <li>• Orchestrates project delivery</li> <li>• Translates objectives into deliverables</li> <li>• Defines the deliverables</li> <li>• Orchestrates outcomes delivery</li> <li>• Plans the change</li> <li>• Actions Sponsor and Owner decisions</li> <li>• Coordinates the project team</li> <li>• Identifies, tracks, reports threats</li> <li>• Tracks delivery and reports progress</li> <li>• Facilitates stakeholder engagement</li> <li>• Applies project management principles and methodologies</li> <li>• Reports project performance</li> </ul>

## Project Management Framework (PMF)

The PMF is made up of five project management stages following proposal for a new project:



## IT Project Controls

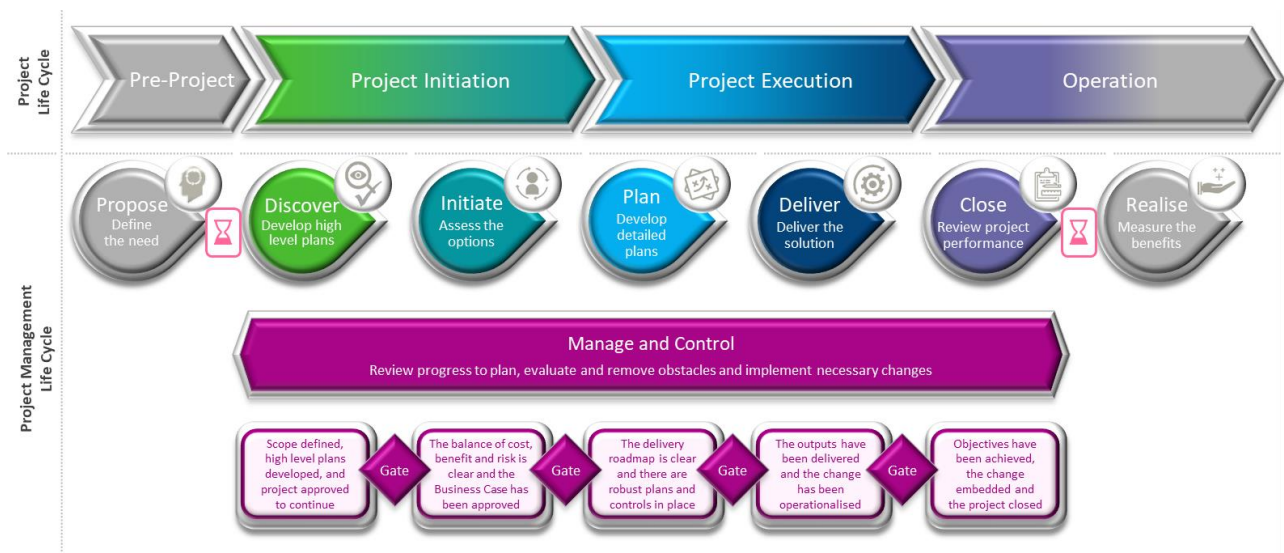
All IT projects are monitored, assessed and controlled using both time-based controls and event-based controls.

Time-based controls involve routine tracking of progress and performance and assessing the impact of any proposed deviations from the baseline position. These controls are depicted in the diagram below:



Event-based controls include formal check point reviews which are embedded into the project lifecycle, triggered by events such as stage completion. Each stage has distinct areas of focus and key artefacts for completion. To exit each stage, stage gate criteria must be met to ensure key deliverables and processes within a stage are completed satisfactorily before the next stage can commence, and to ensure the project is still viable.

These controls are depicted in the diagram below.



## Change Management Framework (CMF)

The CMF is a structured approach to transitioning individuals, teams and the organisation from the current state to the desired future state and aims to maximise the value and likelihood of achieving business outcomes and minimising disruption for our people and customers.

Similar to the PMF, it is a disciplined methodology which is scaled according to its Tier classification (Tier 1 being large, complex and high risk projects through to Tier 4 which are small, simple and low risk projects) and follows a staged approach

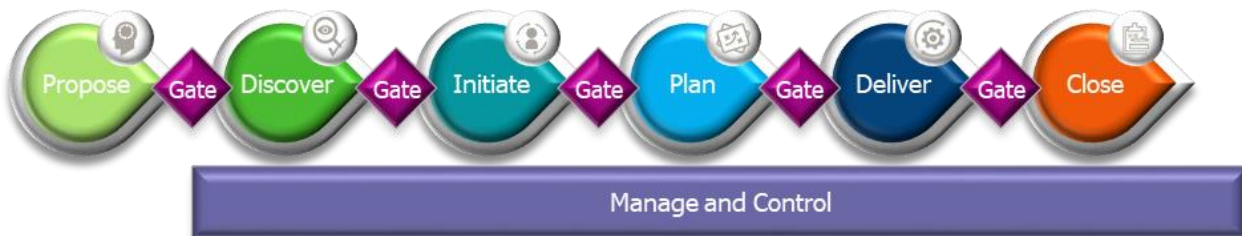
as per the diagram below:

The CMF Tier 1 Complex Projects is depicted below. Tier 2, 3 and 4 projects adopt all relevant steps from Tier 1 as is appropriate for their size, risk and complexity. i.e. Tier 2 has slightly less requirements than Tier 1, Tier 3 less again and so on.

Project Class	All Tiers	Tier 1 Complex Projects					All Tiers	
Phase	Project Management Life Cycle	Propose	Discover	Initiate	Plan	Deliver	Close	Realise
	Change Management	Define the need. Validate and prioritise the project.	Define the scope, develop high level plans & seek approval to continue.	Identify, assess & select solutions. Seek approval to commence	Define the detailed solution. Develop robust plans to deliver.	Develop and deploy the solution. Complete the warranty period.	Hand over benefits, finalise project activities and disband the team.	Embed the change, utilise the capability and measure the benefits.
Objective	Identify the need for change	Build a compelling case for change			Prepare for the change	Ready the business for the change	Embed the change	Measure actual vs expected results
Activities		<ul style="list-style-type: none"> <li>Define the change</li> <li>Identify the change complexity</li> <li>Identify high level impacts</li> <li>Identify critical success factors</li> <li>Identify key stakeholders and the sponsorship model</li> <li>Input into the Business case and Project Management Plan document (PMP)</li> </ul>	<ul style="list-style-type: none"> <li>Assess the change readiness of the business</li> <li>Design the change approach</li> <li>Input into the Business case and Project Management Plan document (PMP)</li> </ul>	<ul style="list-style-type: none"> <li>Develop the detailed change plans</li> <li>Commence Awareness activities</li> </ul>	<ul style="list-style-type: none"> <li>Execute the change plans</li> <li>Gain business approval for the launch/go live</li> <li>Gather stakeholder feedback</li> </ul>	<ul style="list-style-type: none"> <li>Execute the Sustainability Plan</li> <li>Transfer ownership to the business</li> <li>Input into Lessons Learned Review</li> <li>Gather stakeholder feedback</li> <li>Conduct the change audit</li> <li>Input into Post Implementation Review</li> </ul>		
Deliverables		<a href="#">Stakeholder Map</a>	<a href="#">Refine Stakeholder Map</a> <a href="#">Change Impact Assessment</a> <a href="#">Change Complexity Assessment</a> <a href="#">APs</a>	<a href="#">Refine Stakeholder Map</a> <a href="#">Change and Comms Plan</a> <a href="#">Training Needs Analysis (CM Toolkit)</a>	<a href="#">Change Readiness Assessment</a>	<a href="#">Lessons Learnt Agenda</a>	<a href="#">Benefits Realisation Report</a>	

## The Project Assurance Framework (PAF)

The PAF ensures consistent application of the project management governance, artefacts and methodologies required to progress a project from stage to stage.



In addition to providing the basis for progression of a project, the Project Assurance Framework will guide

- Stage-gate assessments between each phase
- Quality Assurance assessments mid-phase, for all post-Propose phases
- Internal and external audits
- Post implementation reviews.

## Appendix C: Application lifecycle management

We utilise an industry-standard application lifecycle management methodology and a practical framework to determine upgrade timelines and priorities. The diagram below outlines the key aspects of this framework.

### Application Lifecycle Management Framework

