January 2026

Powerlink 2027-32 Revenue Proposal

Appendix 4.06
Information Technology Plan

Contents

1. EXECUTIVE SUMMARY

Information Technology (IT) is a key enabler of Powerlink's business operations as a Transmission Network Service Provider (TNSP) in the National Electricity Market (NEM). Our IT systems provide a broad set of services, supporting most business functions, including:

- Enterprise Systems (Finance, Asset Management, HR & Payroll, Procurement & Logistics)
- Digital Engineering & Project Systems (Works Management, Network Planning & Design, Engineering Support)
- Corporate Systems (Safety & Environment, Spatial Management, Site Management, Risk & Governance)
- Desktop, Document & Technology Systems (Service Management, Office Applications, Records Management)
- Information, Analytics & Insights (Data Warehousing, Business Intelligence, Reporting, Decision Support)

Provision of these resilient, reliable IT systems and services is contingent on sound management of Cyber Security risks, and prudent management of IT Devices, Infrastructure and Hosting Services.

Current Regulatory Control Period (2022-27)

In the current period, our IT strategic focus is on systems rationalisation, sustainability, cyber security and strategic data management, while also establishing foundational platforms for business improvement. With this focus, our current period delivery outcomes include:

- **SAP Transformation Program**
  Successful transition to the newest generation SAP platform, for business sustainability and risk mitigation
- **Strategic Data Program**
  Consolidation of data analytics into a contemporary environment, with sustainable integration and governance
- **Human Capital Management (HCM) Program**
  Transfer of HCM and Payroll processes to [redacted], for business flexibility and ongoing compliance
- **Digital Engineering Program**
  Introduction of 3D substation primary systems design and drawing management rationalisation

All of the above current period delivery has been underpinned by prudent uplifts in our Cyber Security defences, consistent with Powerlink's threat risk exposure as an Australian critical infrastructure operator. On completion of the current period, we will have delivered sustainability of our core system platforms and necessary uplifts in our Cyber Security defences.

Coming Regulatory Control Period (2027-32)

In the coming period, our IT strategy is focussed on the following six priority areas:

1 CYBER SECURITY	Combat the growing cyber security threat, with an integrated cyber security program and targeted security uplift initiatives to address specific security related requirements.
2 ENTERPRISE ASSET MANAGEMENT	Enable improved Enterprise Asset Management, using our foundational IT platforms (SAP, Digital Engineering and Strategic Data Management).
3 SAFETY AND ENVIRONMENT	Consolidate Health, Safety and Environmental Management systems, leveraging our foundational IT platforms.
4 SUPPORT AND SUSTAIN	Ensure the sustainability of our IT systems and services, with prudent IT asset lifecycle investments.

5 RECURRENT	Recurrent investments in core IT infrastructure and applications for resilience of services. Also, invest in efficient minor IT works to meet evolving business requirements.
6 CLIENT DEVICES	Cyclic renewals of our end-point devices (including laptops and desktop PCs), to support effective business operations.

The forecast total IT investment in the coming period will be $94.9M (2026/27 Real Post-CAM[1]). Through the forecast investments, we will maintain our IT systems and services into the next decade while also building on our foundational platforms for ongoing security, sustainability and business enablement.

This report includes a roadmap of investments for the coming period (section 4.1, page 17) and further information regarding the planning for each strategic focus area (section 4.2, page 18).

Investment business cases are also provided separately for the four "Non-Recurrent" focus areas (i.e. Cyber Security, Enterprise Asset Management, Health Safety & Environment, and Support & Sustain).

[1] All amounts in this document are provided in 2026/27 Real "post-CAM" terms, representing the regulated Powerlink investment amounts after application of the Cost Allocation Method (CAM).

2. PURPOSE AND SCOPE

2.1. Purpose

This document summarises the Powerlink IT Plan for the 2027-32 Regulatory Control Period. It supports the Regulatory Proposal (RP) to the Australian Energy Regulator (AER) through provision of information including:

- Scope of IT within Powerlink;
- Current period (2022-27) delivery performance for the existing IT investment program; and
- Coming period (2027-32) IT investment forecast, including the planned IT roadmap and a description of key investment priorities.

2.2. Scope of IT within Powerlink

Within Powerlink, the IT business function delivers and maintains technology systems and services to support a broad set of business functions across the enterprise. These systems and services are grouped into "IT Planning Segments" as depicted in Figure 1 below.

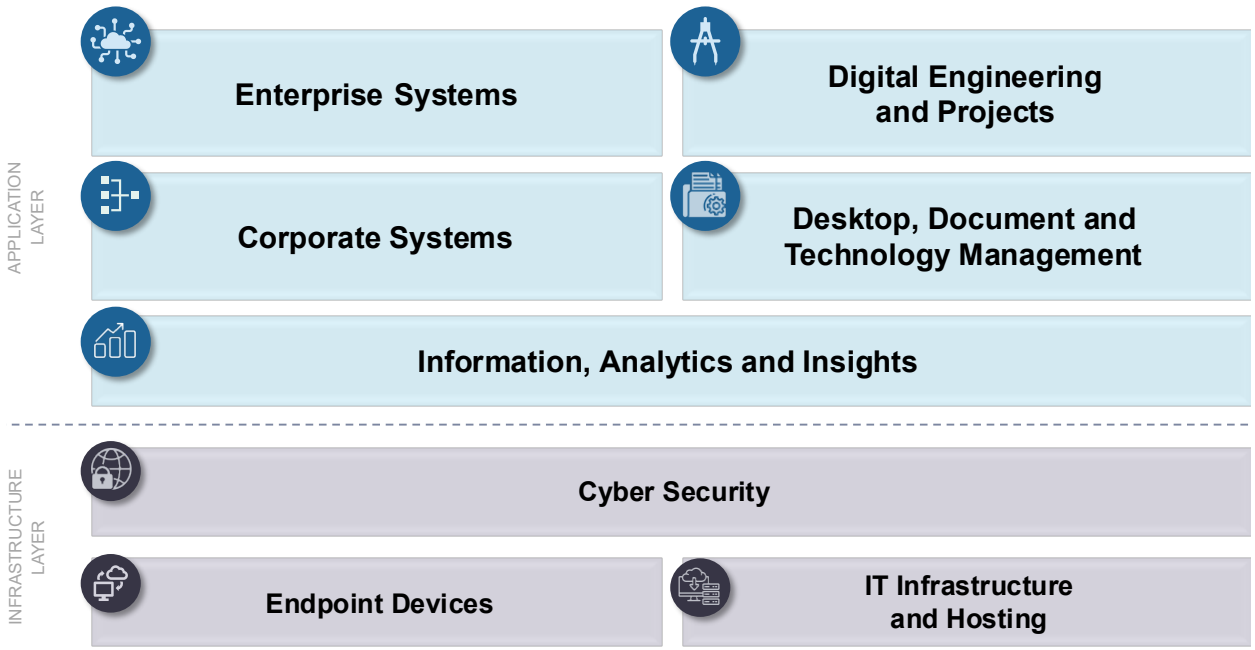


Figure 1: Powerlink IT Planning Segments

Each of the above IT planning segments is described over page.

Planning Segment	Service Scope
Enterprise Systems	Finance & Accounting HCM & Payroll Asset Management Maintenance Management Field Delivery Management Inspections & Field Data Capture Procurement & Contract Management Logistics & Warehouse Management
Digital Engineering and Projects	Works Program Management Portfolio Development Grid Analysis & Planning Design, Engineering Tools & Drawing Management
Corporate Systems	Environment, Health & Safety (EHS) Corporate Emergency Coordination Geographical Information System (GIS) & Mapping Metering & Network Billing Calculation Pricing & Market Data Management Travel Management Facilities & Site Access Management Fleet Management Legal Support Risk & Governance Management
Desktop, Document and Technology Management	Service Management Office Applications Document & Records Management Technology Architecture & Design Delivery & Maintenance Tools Technology Operations & Performance Management Tools
Information, Analytics and Insights	Data Warehousing Business Intelligence Reporting & Analytics Decision Support
Cyber Security	Security Management Tools & Applications Identity & Access Management
Endpoint Devices	Laptops & Desktop Computing Devices

Planning Segment	Service Scope
IT Infrastructure and Hosting	Servers, Storage & Corporate Networking Infrastructure Virtualisation, Databases and Operating Systems Meeting Room & Collaboration Devices

Table 1: IT Planning Segments

2.3. Regulations, Rules and Codes Compliance

As an Australian TNSP and as a Queensland electricity network service provider, Powerlink has a range of legislative and regulatory compliance obligations. Table 2 includes a subset of key instruments and associated obligations for Powerlink, with relevance to IT service delivery.

Instrument	Key obligations and implications
Security of Critical Infrastructure (SOCI) Act 2018 **Security Legislation Amendment (Critical Infrastructure Protection) Act (2022)** **Cybersecurity Act (2024)** **Queensland Government Cyber Security Policy**	▪ Requirement to notify external data service providers of data handling requirements for sensitive critical infrastructure data. ▪ Requirement to register information related to critical infrastructure assets with the Cyber and Infrastructure Security Centre. ▪ Requirement to maintain a compliant Risk Management Program for their critical infrastructure assets. ▪ Requirement to report cyber security incidents that have a significant or relevant impact on their asset. ▪ [redacted]
Privacy Act 1988	▪ Responsibility to protect personal information collected, stored and managed by the organisation. ▪ Comply with the Australian Privacy Principles (APPs) regarding the collection, use, disclosure and security of personal information.
Australian Energy Sector Cyber Security Framework (AESCSF)	▪ Consistent with the organisation's SOCI obligations, the Powerlink Board has set a target of achieving (or exceeding) and maintaining cyber security [redacted]
National Electricity Law and National Electricity Rules	▪ Compliance with all TNSP obligations under National Electricity Law and National Electricity Rules.
Electricity Act 1994 (Queensland)	▪ Compliance with all Licence Obligations of a Transmission Authority holder in Queensland.
Government Owned Corporations Act (Queensland)	▪ Obligations to operate in a manner that aligns with the principles of good corporate governance, transparency, ethics and accountability. This includes responsibilities to deliver reliable and efficient services, contributing to the economic and social development of Queensland.
Public Records Act (Queensland)	▪ Obligations for the management, retention and disposal of records, including requirements to maintain accurate and complete records of activities, decisions and transactions for transparency and accountability. ▪ Additionally, Powerlink is required to protect the integrity and security of these records, ensuring they are accessible and preserved for future reference.

Energy (Infrastructure Facilitation) Act (Queensland)	▪ Various responsibilities, including obligations for collaboration regarding priority Transmission Investments and Regional Energy Hubs.
Work Health and Safety Act 2011	▪ Obligations for the health and safety of the workforce and others who may be affected by Powerlink's operations. Includes requirement to provide a safe working environment, implement risk management processes and ensure that safety measures are maintained to prevent workplace injuries and illnesses. ▪ Further requirements to provide workforce training and supervision, regarding safety procedures and protocols.
Environmental Protection Act 1994	▪ Compliance with environmental standards and regulations to minimise Powerlink's impact on the environment. ▪ Management and mitigation of environmental risks associated with all business operations, including construction, maintenance and operation of electricity transmission infrastructure.
National Greenhouse and Energy Reporting Act 2007	▪ Responsibilities for collecting and maintaining accurate data, to ensure transparency and accountability in the management of greenhouse gas emissions and energy use.

Table 2: Statutory and Regulatory Obligations

3. CURRENT PERIOD (2022-27) IT INVESTMENT SUMMARY

In the current period, our IT strategic focus is on **systems rationalisation**, **sustainability, cyber security** and **strategic data management**, while also **establishing foundational platforms** for business improvement.

Figure 2 depicts our key current period IT delivery outcomes.

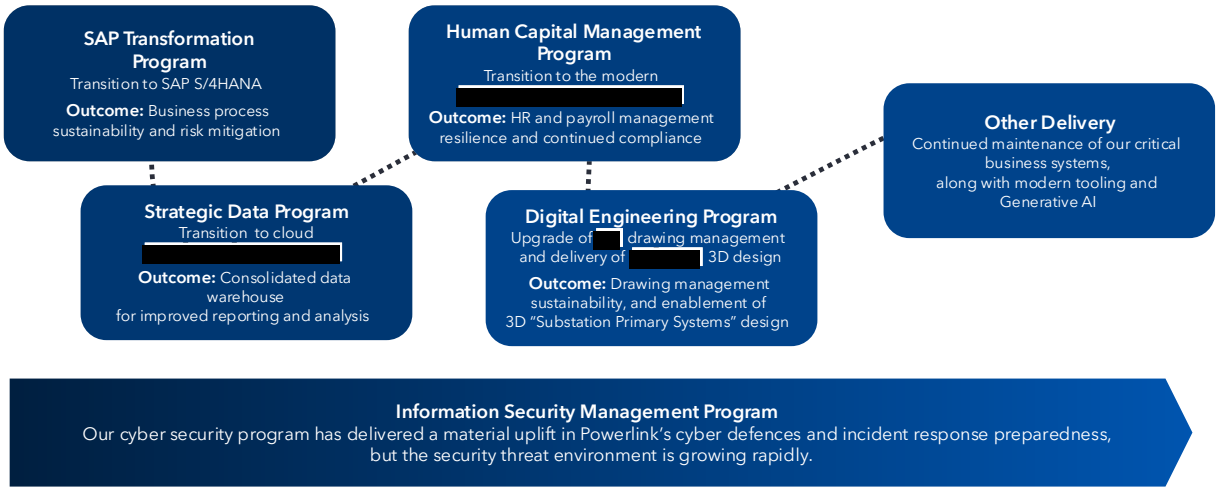


Figure 2: Key current period IT delivery outcomes

The table below summarises the current period delivery works, with mapping to the strategic focus areas.

Program	Scope	Business Outcomes	Strategic Focus Areas
SAP Transformation Program	The SAP Transformation Program has successfully transitioned Powerlink from the legacy SAP "ECC6" software platform to the to the current generation "S/4HANA" system. The program has further ensured ongoing sustainability, through rationalisation of legacy tooling and methods for: ▪ Budgeting, Planning and Forecasting ▪ Performance Reporting ▪ Cost Allocation Management ▪ Supply Chain and Logistics ▪ Business Process Management	▪ Business process sustainability and risk mitigation ▪ Simplification of financial forecasting and budgeting ▪ Sustainable supply chain management resilience ▪ Business process continuous improvement ▪ Security risk mitigation ▪ Streamlined infrastructure operations in a more resilient and modern [redacted] environment	**Systems rationalisation** **Sustainability** **Foundational platforms** - SAP S/4 HANA [redacted]
Strategic Data Program	The Strategic Data Program has delivered data and analytics consolidation and rationalisation, into a consolidated "curated data lake", with sustainable system integrations and governance arrangements. The program scope included:	▪ Consolidation and rationalisation of data warehouse and business intelligence tools ▪ Efficient data analysis, reporting and informed decision-making	**Strategic data management** **Systems rationalisation** **Sustainability** **Foundational platforms**

Program	Scope	Business Outcomes	Strategic Focus Areas
	▪ Establishment of the Cloud Data and Analytics Platform (CDAP) based on modern [redacted] technologies ▪ Integration of the SAP with the CDAP for enterprise reporting and analytics ▪ Consolidation from three data warehouses into the single CDAP, including decommissioning of legacy platforms	▪ Reduced data inaccuracy risk through avoidance of data duplication and improved synchronisation ▪ Improved platform scalability based on based need ▪ Extensibility for modern analytics tools (including AI and machine learning)	[redacted]
Human Capital Management Program	Our HCM program is establishing sustainable HCM and Payroll Management capabilities. The program scope includes: ▪ Transition to the sustainable [redacted] HCM platform ▪ Integration with the SAP S/4HANA Finance and Accounting system and the [redacted] ▪ Implementation of the revised Powerlink Employee Enterprise Agreement ▪ Support for complex rostering and workforce planning ▪ Integration of HCM systems for end-to-end process consolidation (Talent Management, Learning Management, Recruitment Management)	▪ Business process sustainability, resilience and risk mitigation ▪ Flexible enablement of Enterprise Agreement provisions and compliance with payroll management obligations ▪ Improved HR transaction workflow management	**Sustainability** **Foundational platforms** [redacted]
Digital Engineering Program	Our Digital Engineering program is delivering renewed electricity infrastructure design and engineering tools, repositories and processes, consistent with modern infrastructure management practices. The program scope includes: ▪ Introduction of 3D substation primary systems design tools and processes (substation layout, engineering modelling, civil design, reporting and analysis). ▪ Support for 3D transmission lines infrastructure design. ▪ Renewed electricity design and drawing management repository and business processes.	▪ Rationalisation, integration and replacement of design and drawing management systems ▪ Improved design and drawing workflow management (reviews, approvals, transmittals, markup etc.) ▪ Improved drawing version management	**Systems rationalisation** **Sustainability** **Foundational platforms** - [redacted] design tools and repository [redacted] management facility

Program	Scope	Business Outcomes	Strategic Focus Areas
Other Delivery	We're delivering a suite of other IT sustainability and improvement initiatives, to maintain our critical systems and to enable business requirements. These include (but are not limited to): ▪ Establishment of the [redacted] for automation of business workflows and ad hoc data management ▪ Renewal of our Transmission Billing capability ▪ Transition to systematised travel and expense management ▪ Delivery of an integrated Portfolio Risk Management capability ▪ Renewal of the IT Service Management (ticketing) system and other technology management tools ▪ Deployment of [redacted] and Generative Artificial Intelligence (AI) capability ▪ Cyclic renewal of Endpoint Devices and IT Infrastructure, consistent with prudent asset lifecycle management practices	▪ Service and systems sustainability ▪ Cyber security through upgrades with latest security controls ▪ Business requirements enablement ▪ Tooling and processes to reduce data, software and spreadsheet proliferation	**Sustainability** **Cyber security** **Foundational platforms** [redacted]
Information Security Management Program	Prudent investments in Cyber Security are ensuring the resilient operation of our portfolio of systems and services. In the current period our Information Security Management Program (ISMP) has delivered a material uplift in Powerlink's cyber defences and incident response preparedness, consistent with the rapidly growing threat environment. This uplift is reflected in achievement of a security defence level above [redacted] as defined through the Australian Energy Sector Cyber Security Framework (AESCSF). We also continuously monitor and assess our cyber security risk exposure and undertake targeted security augmentation initiatives as required.	▪ Cyber security risk management and service resilience	**Cyber security** **Sustainability**

Current Period (2022-27) IT Investment Observations

- In the current period, our IT strategic focus is on **systems rationalisation**, **sustainability, cyber security** and **strategic data management**, while also **establishing foundational platforms** for business improvement.
- On completion of the current period, we will have delivered **sustainability of our core platforms** with prudent uplift in our **Cyber Security defences to** [redacted] levels**.**

4. COMING PERIOD (2027-32) IT INVESTMENT SUMMARY

Our IT strategy for the coming period (2027-32) is focussed on the following six priority areas:

1 CYBER SECURITY	Combat the growing cyber security threat, with an integrated cyber security program and targeted security uplift initiatives to address specific security related requirements.
2 ENTERPRISE ASSET MANAGEMENT	Enable improved Enterprise Asset Management, using our foundational IT platforms (SAP, Digital Engineering and Strategic Data Management).
3 SAFETY AND ENVIRONMENT	Consolidate Health, Safety and Environmental Management systems, leveraging our foundational IT platforms.
4 SUPPORT AND SUSTAIN	Ensure the sustainability of our IT systems and services, with prudent IT asset lifecycle investments.
5 RECURRENT	Recurrent investments in core IT infrastructure and applications for resilience of services. Also, invest in efficient minor IT works to meet evolving business requirements.
6 CLIENT DEVICES	Cyclic renewals of our end-point devices (including laptops and desktop PCs), to support effective business operations.

A roadmap of planned investments in each of the above focus areas in provided in section 4.1 (page 17).

Further information describing the planned investments is provided in section 4.2 (page 18). Investment business cases are also provided separately for the four “Non-Recurrent” focus areas (i.e. Cyber Security, Enterprise Asset Management, Safety & Environment, and Support & Sustain).

Figure 3 (below) and Table 3 (over page) summarise the forecast IT Investment Expenditure for the coming period (2027-32).

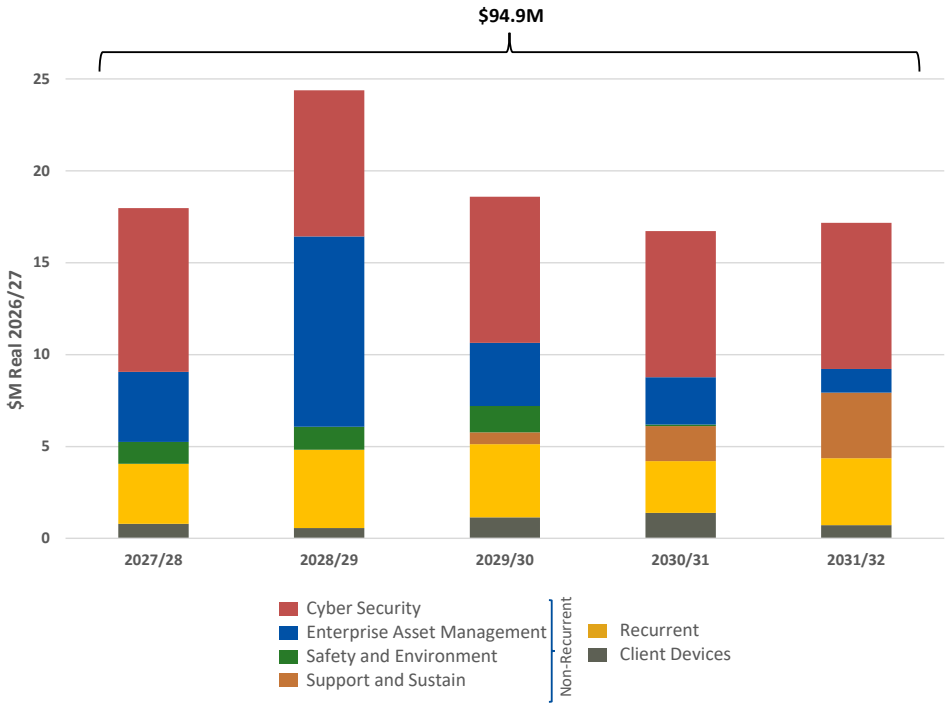


Figure 3: IT Investment Expenditure Summary

IT Investment Expenditure $M Real 2026/27		2027/28	2028/29	2029/30	2030/31	2031/32	2027-32
Non-Recurrent	Cyber Security	8.9	8.0	8.0	8.0	8.0	**40.7**
	Enterprise Asset Management	3.8	10.3	3.4	2.6	1.3	**21.4**
	Safety and Environment	1.2	1.3	1.4	0.1	0.0	**4.0**
	Support and Sustain	0.0	0.0	0.6	1.9	3.6	**6.1**
Recurrent		3.3	4.3	4.0	2.8	3.6	**18.0**
Client Devices		0.8	0.6	1.1	1.4	0.7	**4.6**
Forecast Totals		**18.0**	**24.4**	**18.6**	**16.7**	**17.2**	**94.9**

Table 3: IT Investment Expenditure Summary

With the increased reliance on cloud provisioned Software-as-a-Service (SaaS) systems, investments which would traditionally have been Capex in nature will now become a blend of Capex and "Capex Equivalent" Opex. Table 4 below summarises the breakdown of the forecast investment program accordingly. As can be seen in this table, the coming period investment program will comprise approximately 28% Capex and 72% "Capex Equivalent" Opex. The regulatory proposal includes a Step Change to reflect this "Capex Equivalent" Opex, with recognition of the offset in traditional Capex.

$M Real FY2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2027-32	Proportion
Capex	4.8	5.7	6.2	5.1	4.7	**26.5**	**28%**
(Capex Equivalent) Opex	13.2	18.7	12.4	11.7	12.5	**68.4**	**72%**
Forecast Totals	**18.0**	**24.4**	**18.6**	**16.7**	**17.2**	**94.9**	**100%**

Table 4: IT Investment Expenditure Type Breakdown

As the Capex model submitted to the AER is in Real FY2025/26, table 5 is a restatement of Table 4 in $M Real FY2025/26 for convenience.

$M Real FY2025/26	2027/28	2028/29	2029/30	2030/31	2031/32	2027-32	Proportion
Capex	4.7	5.6	6.1	4.9	4.5	**25.8**	**28%**
(Capex Equivalent) Opex	12.9	18.2	12.0	11.4	12.2	**66.7**	**72%**
Forecast Totals	**17.5**	**23.8**	**18.1**	**16.3**	**16.7**	**92.5**	**100%**

Table 5: IT Investment Expenditure Type Breakdown ($M Real FY2025/26)

Coming Period (2027-32) IT Investment Observations

- Forecast total **IT investment in the coming period will be $94.9M** (2026/27 Real).
- This forecast IT investment will comprise approximately **28% Capex** and **72% "Capex Equivalent" Opex**.
- Our cyclic investments in **Client Devices** and other **Recurrent** expenditures have been planned consistent with prudent asset lifecycle management principles and trended asset expenditures.
- Our **Non-Recurrent Expenditure** for the coming period will focus on Cyber Security, Enterprise Asset Management, Health Safety & Environment and Support & Sustain investment programs.
- Through the forecast investments, we will maintain our IT systems and services, and build on our foundational platforms for ongoing **security**, **sustainability** and **business enablement**.

4.1. IT Investment Roadmap

The IT Investment Roadmap is depicted in Figure 4 (over page).

The roadmap depicts the planned IT investments over the coming period (2027-32), consistent with the planning segments described in section 2.2 (page 5). The roadmap uses colour coding to categorise the investments according the six priority focus areas introduced on the previous page. I.e.:

- **Cyber Security**
- **Enterprise Asset Management**
- **Health, Safety and Environment**
- **Support and Sustain**
- **Recurrent**
- **Client Devices**

Roadmap

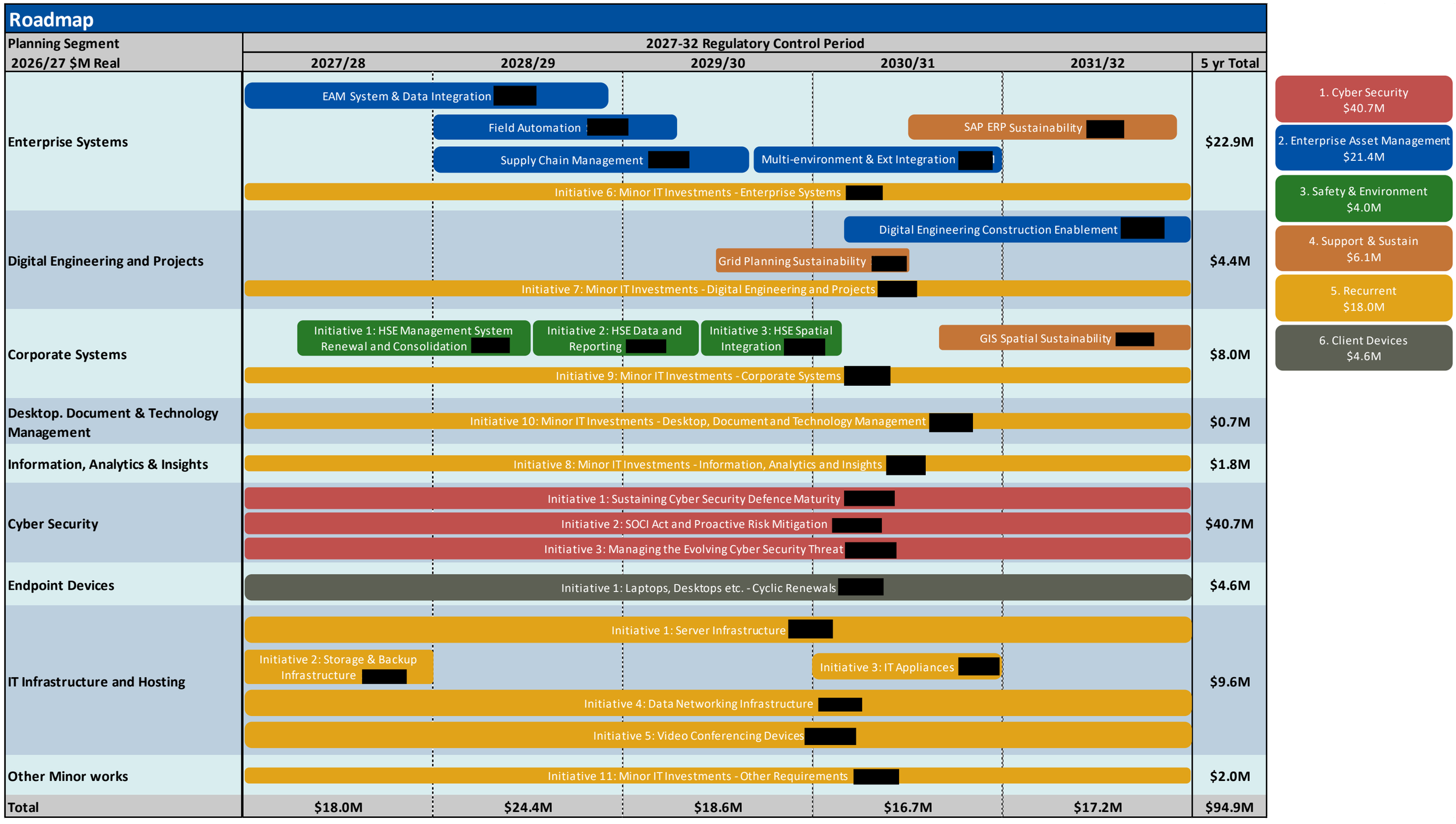


Figure 4: 2027-32 RCP IT Program of Work Roadmap

4.2. IT Investment Focus Area Summaries

This section provides a summary overview of the proposed investments in each of the six focus areas.

4.2.1. Cyber Security

Drivers

Technology and information management are essential to Powerlink's network and business operations. Like all contemporary businesses, Powerlink makes extensive use of systems and information to conduct normal business activities. Powerlink is also reliant on information management to design, build and operate its power and communications networks.

The rapid growth of the cyber security threat within Australia and around the world is well documented. Threat actors seek to leverage organisations' dependence on information and systems for their financial or political gain, which in turn, can disrupt customer service delivery, threaten the achievement of strategic objectives and harm business reputations.

Complex critical infrastructure organisations such as Powerlink present attractive targets. In the past decade, governments have become increasingly focussed on the resilience of critical infrastructure and have sought to ensure that services are protected against a wide range of threats. Prudent and efficient management of strong cyber security defences is therefore inherent in Powerlink's responsibilities to the Australian community.

Consistent with the Security of Critical Infrastructure (SOCI) Act, Powerlink has broad obligations to manage the cyber security of its assets and operations. These responsibilities include:

1. Management of Powerlink's assets consistent with industry-typical cyber security practices in an environment of growing threat, national focus and community expectation;
2. Mitigation of Powerlink's known cyber security risks, within an appropriate managed risk profile and organisational risk appetite; and
3. Maintaining regulatory compliance across all classes information assets, network, systems and equipment.

In the current period (2022-27), Powerlink has achieved a high level of cyber security defence maturity – [redacted]

Maintaining this defence posture is not a set-and-forget proposition. Instead, Powerlink must continue to invest to adapt and extent our cyber security capabilities to address the growing threat.

Description

Powerlink is investing in cyber security through three closely inter-related program streams:

1. **Sustaining Cyber Security Defence Maturity,**
2. **SOCI Act and Proactive Risk Mitigation**, and
3. **Managing the Evolving Cyber Security Threat**.

Sustaining Cyber Security Defence Maturity

Powerlink's cyber security management program provides centralised governance, risk management, assurance and delivery of cyber security initiatives across the organisation's Information Technology (IT) and Operational Technology (OT) environments.

The initial program was established in 2020 as a centrally governed set of initiatives, focussed on uplifting Powerlink's cyber security defences, and maintaining that defence position in an evidence-based, prudent and efficient manner. Since that time, the program has achieved and maintained the current high [redacted] defence maturity rating.

In the coming period (2027-32), Powerlink is committed to the ongoing cyber security program delivery model, with sustainment and targeted enhancement of the [redacted] defence level. This commitment is consistent with industry-typical cyber security practices in an environment of escalating global tensions, evolving cyber threats, national focus and community expectation, by mitigating known and new cyber security risks within an appropriately managed risk tolerance. This defence level has been selected by Powerlink, to prudently balance cyber security risk with the required ongoing investment to maintain that capability level, in alignment with "good practice" industry peers.

Through the program, Powerlink will continue to ensure compliance with legislative and regulatory requirements through defined and targeted risk management practices, preparedness, prevention and resilience, and with necessary information exchange between industry and government.

Key functions of the program in the coming period will include:

- Program governance over all Powerlink cyber security initiatives (IT and OT). These initiatives are monitored and reported into a centralised Information Security Senior Governance Group (ISSGG)
- Ongoing sustainment and targeted enhancement of the [redacted] defence level, including document updates, embedding process changes and audit outcomes, benchmarking and coordination of external cyber security exercises
- Execution and coordination of Powerlink's Information Security Management System (ISMS), ensuring security risks are systematically assessed and mitigated in alignment with business objectives

- Planned Threat Risk Assessment (TRA) and remediation activities consistent with Powerlink's risk tolerance framework
- Continuous improvement of incident playbooks and Business Continuity Planning (BCP)
- Cyber security awareness training programs
- Continued uplift of cyber security toolsets
- Cyber security assurance through evaluation, verification and continuous improvement of security controls
- Periodic review and uplift of Cyber Security Incident Response and Recovery Plans
- Plus other critical cyber security initiatives

SOCI Act and Proactive Risk Mitigation

Obligations under the SOCI Act continue to evolve. The Australian Signals Directorate (ASD) regularly provides new guidance for critical infrastructure operators, and it is Powerlink's expectation that these guidelines, or versions of them, will become obligations over time. Powerlink, along with other critical infrastructure entities, works closely with the ASD in co-operation with its Critical Infrastructure Uplift Program (CI-UP) which regularly provides advice and recommendations to further secure Powerlink's assets through targeted investments.

Managing the Evolving Cyber Security Threat

Powerlink also undertakes a targeted program of cyber security uplift investments to address specific technical cyber security issues. Given the rapidly changing cyber security threat environment, the scope and plan for these Cyber Security Strategic Uplift investments is emergent on an ongoing basis.

Focus areas in the coming period will include adoption of a "Zero Trust" cyber security architecture, progressive leveraging of AI-driven security solutions, and improvements in incident response simulation methods.

Financial

Total IT Investment over the coming period (2027-32) consists of:

1.	Sustaining Cyber Security Defence Maturity	[redacted]
2.	SOCI Act and Proactive Risk Mitigation	[redacted]
3.	Managing the Evolving Cyber Security Threat	[redacted]
		$40.7M

Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					
	2027/28	2028/29	2029/30	2030/31	2031/32	5yr Total
Cyber Security	Initiative 1: Sustaining Cyber Security Defence Maturity [redacted]					**$40.7M**
	Initiative 2: SOCI Act and Proactive Risk Mitigation [redacted]					
	Initiative 3: Managing the Evolving Cyber Security Threat [redacted]					

4.2.2. Enterprise Asset Management

Drivers

As a major infrastructure Asset Manager and Operator, Powerlink is continuously refining and optimising its asset management effectiveness. To that end, the organisation's key asset management objectives are to:

1. Maintain electricity network reliability and security;
2. Maintain asset safety;
3. Ensure asset management decisions support sustainable business outcomes;
4. Maintain asset risk within the corporate risk appetite; and
5. Use asset information to inform business-wide decisions.

By leveraging accurate, accessible asset information, enabled through high-quality data, advanced analytics and innovative technologies, Powerlink will drive informed decisions, improve operations and automation, and ensure alignment with the above asset management objectives. Powerlink's vision for asset information management includes:

- Integrated data systems;
- Transparency, accessibility and consistency of data;
- Standardised processes and governance;
- Project information integration and accuracy;
- Unique asset identification across the lifecycle; and
- Empowerment, collaboration and enablement of future business improvement (e.g. through AI and predictive analytics).

In the current period (2022-27), Powerlink has laid several foundations for this vision, including through:

- Transition to the sustainable SAP S/4HANA software platform;
- Digital Engineering deployment of renewed electricity infrastructure design and engineering tools, repositories and processes, consistent with modern infrastructure management practices; and
- Strategic Data Program delivery of a centralised data analytics repository and tooling.

In the coming period (2027-32) we will build on these foundations, both for the purposes of IT systems sustainability and also as an enabler of

Powerlink's asset management improvement vision.

Description

Our planned Enterprise Asset Management (EAM) investments in the coming period include:

- **EAM System and Data Integration**

  Our asset data stores will be consolidated and integrated within SAP S/4HANA and the Digital Engineering Common Data Environment (CDE). Integrated asset and operational data will also be warehoused in the Strategic Data Platform enabling accurate and timely access to asset information, with defined data governance, transparency of data sourcing, and avoidance of duplication.
  This investment will also establish and maintain a consistent asset model and unique asset identification across the asset lifecycle from planning to design, construction, commissioning, maintenance and decommissioning.
  Consolidation and integration into our core system platforms will mitigate asset management risk, while also enabling improvement in asset management practices consistent with the key objectives and vision.

- **Field Automation**

  Asset management continuous improvement is dependent on the timely and accurate monitoring of field data, including through mobile applications, asset inspections and automated workflows. Powerlink field work crews are currently equipped with secure tablet devices, with maintenance and event response work scheduled in conjunction with the core SAP asset and works management platform. In the coming period we'll build on this foundation, to provide field crews with a consolidated set of asset information directly applicable to their work tasks, including equipment specifications, maintenance histories, 3D Computer Aided Design (CAD) drawings, configuration data, and safety risk information (e.g. asbestos, chemical and other site risk details).
  Using the Field Automation platform, our crews can record first-hand information to update and maintain our asset data accuracy, while also capturing asset condition data as an enabler of further asset maintenance planning effectiveness. Integration of Field Automation with our consolidated Portfolio and Program Management (PPM) system will also enable improved workflow checkpoint safeguards, to ensure accuracy of our as-constructed and as-commissioned asset data.

- **Supply Chain Management**

Powerlink currently operates a diverse and disparate set of system capabilities, tools and processes supporting our core supply chain management business functions, from planning and sourcing, through to contracts, materials and inventory management, as well as warehousing and logistics. Many existing processes are highly manual, involving off-system data stores that lack data integration or systemised data integrity management.
In the coming period we'll therefore leverage the investment in SAP S/4HANA to provide a robust and scalable supply chain management platform, with sustainable master data governance, direct EAM asset data integration, and improved materials forecasting and planning. The solution will facilitate seamless data flow from sourcing to projects and into operations, with contemporary supplier management capabilities, contracts management and inventory management. The solution will also integrate with the Field Automation platform, providing mobile workforce access for near real-time supply chain visibility and workflow management.

- **Multi-Environment and External Integration**

  We'll provide curated access to our integrated asset model, project and digital engineering data, and near real-time operational data through multiple internal and external systems, targeted to specific user groups and purposes.
  This includes provision of core asset data, maintenance histories and design information to program managers, designers, asset managers, construction projects, network operators, field teams and authorised contractors. This transition will enable improved insights for operations, planning and decision support.

- **Digital Engineering Construction Enablement**

  Building on our existing investment in 3D primary systems design, we'll enable improved construction project delivery effectiveness consistent with contemporary ISO 19650 industry practices. This includes modular, multi-discipline construction lifecycle management, advanced work planning, smart completions and digital forms.

Financial

Total Investment over the coming period (2027-32) consists of:

1.	EAM System and Data Integration	[redacted]
2.	Field Automation	
3.	Supply Chain Management	
4.	Multi-Environment and External Integration	
5.	Digital Engineering Construction Enablement	
		$21.4M

Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					5yr Total
	2027/28	2028/29	2029/30	2030/31	2031/32	
Enterprise Asset Management	EAM System & Data Integration [redacted]	Field Automation [redacted]	Supply Chain Management [redacted]	Multi-environment & Ext Integration [redacted]	Digital Engineering Construction Enablement [redacted]	**$21.4M**

4.2.3. Health, Safety and Environment

Drivers

Our Health, Safety and Environment (HSE) program supports the prudent management of Powerlink's environmental obligations and enables the ongoing safety of our workforce, our contractors and the community.

Our current HSE management tools and databases are spread across multiple aging systems. Given the critical business priority of these processes and information holdings, investment is required for the purposes of consolidation, sustainability and business improvement.

Key improvement, sustainability and extensibility focus areas include:

1. Psychosocial Safety Risk Management;
2. Chemical Safety Risk Management;
3. Asbestos Risk Management;
4. Assurance Management for High-Risk Activities;
5. Integration of GIS and HSE Data Sets; and
6. HSE Data Reporting Sustainability and Flexibility.

In the coming period (2027-32) we will build on our foundational system platforms, including SAP and the Strategic Data Platform, to address these business priorities and to ensure the long-term sustainability of our Safety and Environmental systems and data management.

Description

Our planned Safety and Environment investments in the coming period include:

- **HSE Management System Renewal and Consolidation**

  We'll consolidate our various safety technologies and data stores into a single, sustainable HSE solution. This will include standardisation of data capture methods with a consistent user experience (UX), for end-to-end visibility of safety and environment data, incident management, root cause

analyses, and for alerting and response management. We'll also integrate safety and environment data capture processes with other targeted systems, for ready access across our business operations.

- **HSE Data and Reporting**

  We'll leverage our Strategic Data Platform for improvement in HSE reporting, including ongoing compliance with all reporting obligations.

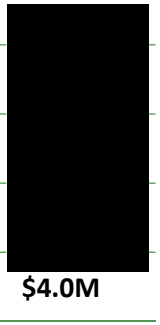
- **HSE Spatial Integration**

  We'll integrate the HSE solution with the Geographic Information System (GIS) for planning and operational visibility across Powerlink's service area. This will also better support analysis of trends in HSE performance, for targeted process and behaviour interventions.

Financial

Total Investment over the coming period (2027-32) consists of:

1. HSE Management System Renewal and Consolidation
2. HSE Data and Reporting
3. HSE Spatial Integration



Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					
	2027/28	2028/29	2029/30	2030/31	2031/32	5yr Total
Safety and Environment	Initiative 1: HSE Management System Renewal and Consolidation [redacted]		Initiative 2: HSE Data and Reporting [redacted]	Initiative 3: HSE Spatial Integration [redacted]		$4.0M

4.2.4. Support and Sustain

Drivers

Powerlink's major systems are periodically upgraded to ensure supportability, sustainability and security consistent with prudent asset lifecycle management principles.

While many of our applications are upgraded through the Recurrent investment program (see section 4.2.5, page 30), several more significant system upgrades or renewals are required in the coming period (2027-32), requiring specific planning and preparation.

These targeted investments focus on the following Powerlink systems:

- Grid Planning Systems;
- The SAP S/4HANA Enterprise Resource Planning (ERP) system; and
- The GIS Spatial Data Management system.

The Support and Sustain investments reflect prudent asset lifecycle management of our critical system platforms.

Description

Our planned Support and Sustain investments in the coming period include:

- **Grid Planning Renewal**
  Electricity grid planning is an increasingly critical and complex transmission network management activity. In the coming period, we'll therefore invest to renew our grid planning capability, enabling sustainable and planning effectiveness.
- **SAP ERP Sustainability**
  In the coming period, we'll need to invest to upgrade the foundational SAP software platform. This upgrade will deliver ongoing platform sustainability, while also emphasising agility, operational simplicity, security and process best-practice.

- **GIS Spatial Sustainability**
  Spatial data management is a critical feature of our electricity network planning, project delivery, operations and emergency management. Spatial data management technologies are rapidly evolving, and it is therefore forecast that a significant update to our existing GIS Spatial Data Management systems will be required prior to the end of the coming period.

Financial

Total Investment over the coming period (2027-32) consists of:

1.	Grid Planning Renewal	[redacted]
2.	SAP ERP Sustainability	
3.	GIS Spatial Sustainability	
		$6.1M

Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					5yr Total
	2027/28	2028/29	2029/30	2030/31	2031/32	
Support & Sustain			Grid Planning Sustainability [redacted]	SAP ERP Sustainability [redacted]	GIS Spatial Sustainability [redacted]	**$6.1M**

4.2.5. Recurrent

Drivers

Each year, Powerlink invests to maintain its technology infrastructure, equipment, systems, tools and other assets consistent with prudent asset lifecycle management principles.

The Recurrent investment program invests in technology renewals in the following asset classes:

- Server infrastructure;
- Storage and backup infrastructure;
- IT appliances;
- Data networking infrastructure (including routers, switches, firewalls and wireless access points); and
- Video conferencing devices.

The program also includes a forecast of Minor IT Investments within each of the application planning segments described in section 2.2 (page 5), and for other business change. These Minor IT Investments are undertaken in order to maintain the currency of our business systems and to address changing business requirements or obligations.

Description

Powerlink's IT Infrastructure includes multiple classes of technology which are maintained and renewed on a cyclic basis.

This approach ensures that our technology remains serviceable, supportable and secure. Cyclic asset lifecycle management also ensures the technology remains sustainable through the provision and application of vendor patching to mitigate cyber security risks and to maintain compatibility with hosted applications.

Table 5 below (page 31) summarises Powerlink's Recurrent IT Infrastructure classes and the corresponding asset lifecycle management practice.

Asset Category	Asset Class	Asset Lifecycle Management Guideline	Forecast Replacement Age
Server Infrastructure	Rackmount Server	Infrastructure is replaced upon identified obsolescence following extended warranty period which is typically 5 years	5 years
	Blade Server	Infrastructure is replaced upon identified obsolescence following extended warranty period which is typically 5 years	5 years
	Blade Server Enclosure	Infrastructure is replaced upon identified obsolescence	10 years
Storage and Backup Infrastructure	High performance storage (Tier 1)	Infrastructure is replaced following warranty expiry	7 years
	SAN storage array (Tier 2+)	Infrastructure is replaced following warranty expiry	7 years
	High speed database appliances	Infrastructure is replaced following warranty expiry	7 years
	Backup facilities	Backup facilities are renewed following warranty expiry.	7 years
IT Appliances	Vault nodes and other appliances	Devices are replaced through a cyclic renewal program or on failure	5 years
Data Networking Infrastructure	LAN devices	Devices are replaced in line with vendor “end of support” / “end of life” designations, to ensure vendor support is available (i.e. availability of active patching and security updates).	5 years
	Data Centre, WAN And Perimeter Devices	Devices are replaced in line with vendor “end of support” / “end of life” designations, to ensure vendor support is available (i.e. availability of active patching and security updates).	5 years
Video Conferencing Devices	Video Conferencing Units	Devices are replaced through a cyclic renewal program or on failure	5 years
	Meeting Room Displays	Devices are replaced through a cyclic renewal program or on failure	5 years

Table 5: Recurrent Infrastructure Asset Lifecycle Management Guidelines

Recurrent Minor IT Investments in software updates, upgrades or compliance changes are estimated for each of the application planning segments described in section 2.2 (page 5) and to address other business change requirements and obligations, consistent with historical investment trends.

Financial

Total Investment over the coming period (2027-32) consists of:

1. Server Infrastructure
2. Storage & Backup Infrastructure
3. IT Appliances
4. Data Networking Infrastructure
5. Video Conferencing Devices
6. Recurrent Minor IT Investments
   - *Enterprise Systems*
   - *Digital Engineering and Projects*
   - *Information, Analytics and Insights*
   - *Corporate Systems*
   - *Desktop, Document and Technology Management*
   - *Other Requirements*

[redacted]

Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					5yr Total
	2027/28	2028/29	2029/30	2030/31	2031/32	
Recurrent	Initiative 1: Server Infrastructure [redacted]					$18.0M
	Initiative 2: Storage & Backup Infrastructure [redacted]			Initiative 3: IT Appliances [redacted]		
	Initiative 4: Data Networking Infrastructure [redacted]					
	Initiative 5: Video Conferencing Devices [redacted]					
	Initiative 6: Minor IT Investments - Enterprise Systems [redacted]					
	Initiative 7: Minor IT Investments - Digital Engineering and Projects [redacted]					
	Initiative 8: Minor IT Investments - Information, Analytics and Insights [redacted]					
	Initiative 9: Minor IT Investments - Corporate Systems [redacted]					
	Initiative 10: Minor IT Investments - Desktop, Document and Technology Management [redacted]					
	Initiative 11: Minor IT Investments - Other Requirements [redacted]					

4.2.6. Client Devices

Drivers

Similar to the Recurrent investment program (section 4.2.5, page 30), each year Powerlink undertakes cyclic renewals of end-user technology consistent with prudent asset lifecycle management principles.

The Client Devices program invests in technology renewals in the following asset classes:

- Laptop computers;
- Desktop computers;
- Tablet devices;
- Monitors and peripherals.

Description

As with the Recurrent investment program (section 4.2.5, page 30), the cyclic investment in Client Devices ensures that our technology remains serviceable, supportable and secure.

Table 6 below summarises Powerlink's Client Device asset classes and the corresponding asset lifecycle management practice.

Asset Category	Asset Class	Asset Lifecycle Management Guideline	Forecast Replacement Age
Client Devices	Laptop (General)	Infrastructure is replaced upon identified obsolescence following extended warranty period	4 years
	Laptop (High Powered)		3 years
	Laptop (Field and Tablet Devices)		4 years
	Desktop (General)		4 years
	Monitors (General)		5 years
	High resolution plotter		5 years

Table 6: Client Device Asset Lifecycle Management Guidelines

Financial

Total Investment over the coming period (2027-32) consists of:

1.	Client Devices	$4.6M
		$4.6M

Timeline

Investment Program 2026/27 $M Real	2027-32 Regulatory Control Period					
	2027/28	2028/29	2029/30	2030/31	2031/32	5yr Total
Client Devices	Initiative 1: Laptops, Desktops etc. - Cyclic Renewals $4.6M					**$4.6M**

5. IT PROGRAM DELIVERY GOVERNANCE AND ASSURANCE

Powerlink's IT program delivery is governed in accordance with the Queensland Government Enterprise Architecture framework, consistent with the Financial and Performance Management Standard (2019). This framework identifies best practice processes for delivery assurance of digital and IT-enabled portfolios, programs and projects.

A risk-based approach is taken to program delivery assurance, with the aim to provide the right level of assurance for each initiative, based on the investment risk profile as determined by a set of portfolio-specific considerations.

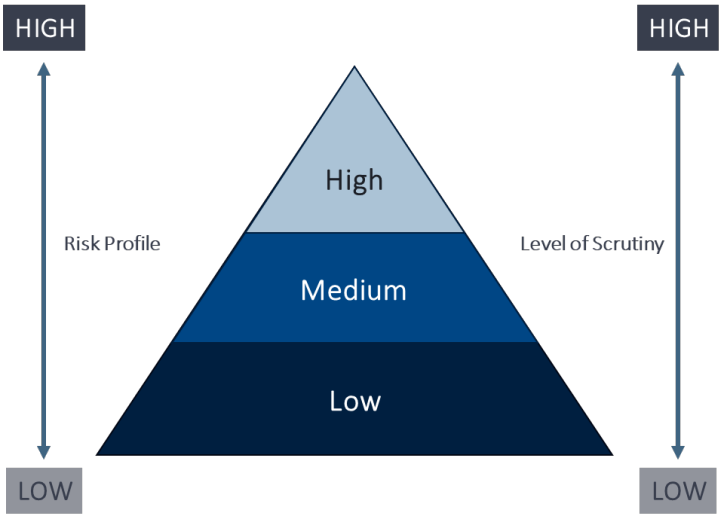


Figure 5: Risk-based delivery assurance approach principles

Table 7 below identifies the considerations to determine the level of rigour and frequency of assurance activities across the project lifecycle. The risk profile serves as a critical input to developing and adapting the project assurance plan.

Focus Area	Considerations
Finance	▪ What is the expected project cost exposure?
Time	▪ What is the projected completion timeframe?
Scope	▪ Is the scope clearly defined and are requirements understood?
Architecture	▪ Is the solution architecturally challenging?
Security	▪ Is the project working with sensitive data and are there expected changes to security process, controls or business continuity?
Change Impact	▪ What is the level of change impact by the project?
Service Transition	▪ How will the project impact ongoing service delivery and operational handover readiness?
Operations	▪ What is the level of operational impact by the project?
Procurement	▪ If procurement is required, what is the procurement risk exposure?
Resources	▪ Do the resources allocated to the project have the right capability?
Governance	▪ Is the project governance structure providing appropriate oversight and decision-making capabilities?

Table 7: Assurance assessment considerations

Key assurance focus areas for the IT investment portfolio include:

- **Business Case:** The business case defines the rationale and justification for the proposed investment and outlines the expected costs, benefits, risks and impacts of the project. The assurance activities for this focus area include reviewing the alignment of the business case with the strategic objectives and validating the viability of the proposed solution.
- **Go-Live (Pre):** This phase covers the final preparation and readiness activities before the project delivers its outputs and outcomes to the end users and stakeholders. The assurance activities for this focus area include verifying the quality and completeness of the testing and user acceptance, evaluating the effectiveness of the change management and communication plan, and ensuring the availability and adequacy of the support and training resources.
- **Go-Live (Post):** This phase covers the initial monitoring and evaluation of the project's performance and impact after the implementation of the solution. The assurance activities for this focus area include measuring the achievement of the expected outcomes to enable benefits, identifying and resolving any issues or defects, and capturing and sharing the lessons learned and best practices.

Multiple tiers of governance oversight are provided across the IT investment portfolio and individual projects as depicted in Figure 6 below.

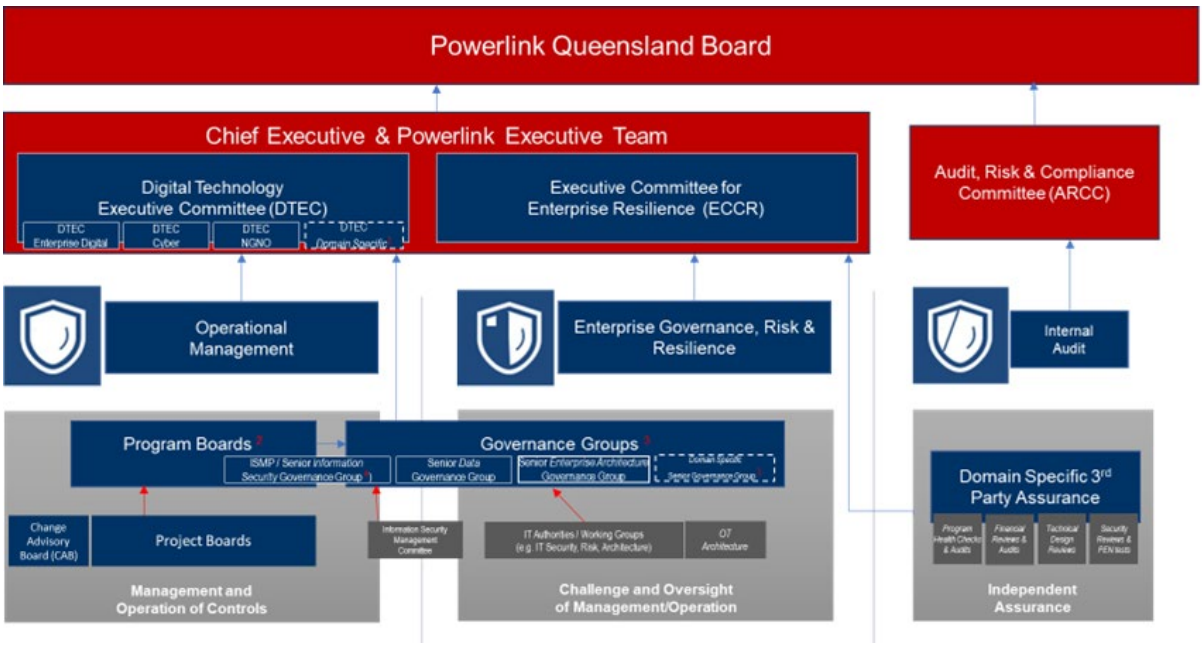


Figure 6: IT program assurance governance chart

The following table outlines the function and authority of each group in the above chart.

Group or Role	Function/Authority
Powerlink Queensland Board	▪ Providing ultimate governance oversight for Powerlink's business operations, including IT program delivery effectiveness.
Digital Technology Executive Committee (DTEC)	▪ Providing strategic guidance and input for the development and delivery of IT capability, including strategy, resources allocation and IT investment priorities.

Group or Role	Function/Authority
	▪ Reviewing and providing guidance and input to proposed IT projects/ programs to ensure alignment with business strategy and business case viability, based on the intended outcomes to enable benefits to be realised.
Executive Committee for Enterprise Resilience (ECCR)	▪ Identifying, assessing and mitigating risks, and developing plans to respond to and recover from crises. ▪ Ensuring business operations continue during disruptions. ▪ Managing technology and cybersecurity risks and ensuring the resilience of the supply chain.
Audit, Risk & Compliance Committee (ARCC)	▪ Ensuring the integrity of financial reporting and the effectiveness of internal controls. ▪ Identifying, assessing and managing risks, and ensuring compliance with legal and regulatory requirements. ▪ Oversight of the performance of internal and external auditors and reviewing audit reports.
Program / Project Boards	▪ Ensuring individual projects are adhering to the approved assurance plan. ▪ Ensuring projects undertake assurance activities at key decision points. ▪ Review and approval of action plans to address assurance recommendations prior to the next decision point.
Project Executive	▪ Ensuring that an adequate assurance regime is in place for all aspects of a project – including quality, gateway, investment, technical, security, financial and architecture. ▪ Initiating assurance and audit reviews.
Senior Supplier	▪ Undertaking project assurance from the supplier perspective. The role is accountable for the quality of products delivered by the vendor (supplier) and is responsible for the technical integrity of the project.
Senior User	▪ Undertaking project assurance from the user perspective. The role is responsible for specifying the needs of those who will use the project's products, for user liaison with the project management team, and for monitoring that the solution will meet those needs within the constraints of the business case in terms of quality, functionality, and ease of use.
Change Advisory Board (CAB)	▪ Reviewing and evaluating proposed changes to the organisation's IT infrastructure, systems, processes, and services. ▪ Scheduling and coordinating the implementation of approved changes to minimise disruptions.
Domain Assurance - Internal Assurance	▪ Quality reviews of key artefacts ensuring completeness, accuracy, and compliance to policies, standards, and processes. ▪ Pragmatic advice on the application of functional stream specific assurance.

Table 8: IT program assurance roles

Contact us

Registered office	33 Harold St Virginia Queensland 4014
	ABN 82 078 849 233
Postal address	PO Box 1193 Virginia Queensland 4014
Telephone	+61 7 3860 2111 (during business hours)
Email	pqenquiries@powerlink.com.au
Website	powerlink.com.au
Social	