

**ID09 Service Interaction Portal
Consolidation and Replacement
Preliminary Gate 2 Business Case**

**2020-25
January 2019**



Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Document Version

Version: 3.1	
Date:	January 2019

Contents

1	EXECUTIVE SUMMARY	4
1.1.	BACKGROUND & BUSINESS PROBLEM	4
1.2.	INVESTMENT OVERVIEW	4
1.3.	OPTIONS ANALYSIS	5
1.4.	FINANCIAL SUMMARY	5
1.4.1	ENERGEX OPTION COMPARISON	5
1.4.2	ERGON ENERGY OPTION COMPARISON	5
1.4.3	ENERGEX EXPENDITURE SUMMARY (OPTION 1 – PREFERRED).....	5
1.4.4	ERGON ENERGY EXPENDITURE SUMMARY (OPTION 1 – PREFERRED).....	6
1.5.	BENEFITS	6
1.6.	INVESTMENT RISKS	6
1.7.	CUSTOMER FOCUS	6
2.	INVESTMENT OVERVIEW	7
2.1.	BACKGROUND AND HISTORY	7
2.2.	BUSINESS PROBLEM AND RATIONALE	7
2.3.	INVESTMENT OBJECTIVES.....	8
2.4.	PRINCIPLES	9
3.	STRATEGIC ALIGNMENT	10
3.1.	ALIGNMENT TO ENERGY QUEENSLAND STRATEGIC OBJECTIVES	10
3.2.	ALIGNMENT WITH NATIONAL ELECTRICITY RULES (NER).....	10
3.3.	ALIGNMENT WITH THE DIGITAL OFFICE APPLICATION ASSET MANAGEMENT GUIDELINES	12
3.4.	REGULATORY IMPLICATIONS	13
4.	INVESTMENT SCOPE	14
4.1.	FUNCTIONAL SCOPE.....	14
4.2.	SOLUTION OVERVIEW	14
4.2.1	CURRENT STATE (2018).....	14
4.2.2	TARGET STATE (END OF THE PROPOSED INVESTMENT).....	15
4.3.	ASSUMPTIONS	15
4.4.	DEPENDENCIES	16
5.	OPTIONS ANALYSIS	17
5.1.	OPTION 1 – PROCEED WITH THE SI PORTAL CONSOLIDATION AND REPLACEMENT (PREFERRED)	17
5.2.	OPTION 2 – UPGRADE THE EXISTING SI PORTALS AND DEFER REPLACEMENT UNTIL THE FY26-30 PERIOD.....	17
5.3.	OPTION 3 – DO MINIMAL	17
5.4.	OPTION COMPARISON.....	18
6.	PREFERRED OPTION	21
6.1.	DELIVERY TIMELINE AND APPROACH	21
7.	INVESTMENT BENEFITS OVERVIEW	22
7.1.	FINANCIAL AND OTHER BENEFITS	22
8.	FINANCIAL ANALYSIS.....	23
8.1.	SCOPE OF COSTS	23
8.2.	COST ASSUMPTIONS	24
8.3.	FINANCIAL SUMMARY	25
8.3.1	ENERGEX OPTION COMPARISON	25
8.3.2	ERGON ENERGY OPTION COMPARISON	25
8.3.3	ENERGEX EXPENDITURE SUMMARY (OPTION 1 – PREFERRED).....	25
8.3.4	ERGON ENERGY EXPENDITURE SUMMARY (OPTION 1 – PREFERRED).....	25
8.4.	NPV CALCULATION PARAMETERS.....	25
9.	PROGRAM DELIVERY	26

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



9.1.	PROGRAM GOVERNANCE & DELIVERY	26
9.2.	STAKEHOLDER MANAGEMENT	28
9.2.1	KEY INTERNAL STAKEHOLDERS	28
9.2.2	KEY EXTERNAL STAKEHOLDERS	28
10.	RISK ASSESSMENT	29
10.1.	ORGANISATIONAL RISK ASSESSMENT.....	29
10.2.	PRELIMINARY IMPLEMENTATION RISK ASSESSMENT	32
11.	CHANGE IMPACTS	33
11.1.	INVESTMENT SYSTEM IMPACTS	33
11.2.	PEOPLE & PROCESS IMPACTS.....	33
APPENDIX A - NEW CONNECTION LIFECYCLE		34
APPENDIX B - GLOSSARY.....		35

1 EXECUTIVE SUMMARY

1.1. Background & Business Problem

The Service Interaction Portals (SI Portals) deployed by Energex and Ergon Energy provide web browser based self-service capability to support efficient distributor operations in the National Electricity Market (NEM). The capability was initially introduced for electrical works requests and has been progressively expanded to support broader distributor interactions with customers, electrical service providers and retailers.

The self-service capability is enabled through portal applications accessed via the respective Energex and Ergon Energy websites. The SI Portals were implemented in March 2011 and are key platforms enabling the distributors' compliance with the National Energy Customer Framework (NECF) and Power of Choice (PoC) reform initiatives.

The SI Portals provide the following self-service capabilities to customers, contractors and retailers:

- Customer SI Portal
 - View connection status
 - View service order status
 - Maintain customer details
 - Register a Guaranteed Service Level (GSL) claim
 - Register tree trimming request
 - Report street light outages and other events
- Electrical Contractor / Service Provider SI Portal
 - Initiate connection requests
 - Initiate solar photo-voltaic (PV) requests
 - View service order status
 - View service order history
 - Notify of Service Order status change
- Retailer SI Portal
 - National Metering Identifier (NMI) enquiry
 - View service order status
 - View outage information

This SI Portal Consolidation and Replacement initiative primarily responds to the need for an ongoing supportable and sustainable platform to service the Energy Queensland distribution customer base.

This investment will replace the SI Portals with a unified solution utilising contemporary technology. It will also leverage associated "back-end" solution replacements to support consistent state-wide business processes and customer service as described in Energy Queensland's Customer Strategy and Customer Experience Framework.

1.2. Investment Overview

Through this business case proposal, the separate legacy Energex and Ergon Energy SI Portal implementations will be replaced with a unified solution, subject to conformance with security, privacy and ring-fencing obligations. Further, as the energy market continues to evolve, the two Energy Queensland distributors will benefit from associated changes needing to be undertaken on just a single unified solution.

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



1.3. Options Analysis

This business case considers the following options:

- Option 1 – Proceed with the SI Portal Consolidation and Replacement (Preferred)
- Option 2 – Upgrade the existing SI Portals and defer replacement until the FY26-30 period
- Option 3 – Do minimal

“Option 1 - Proceed with the SI Portal Consolidation and Replacement” is the preferred option, as it meets all the business case objectives, it is aligned with Energy Queensland’s strategic objectives and is consistent with Energex and Ergon Energy’s obligations under the National Electricity Rules.

“Option 2 - Upgrade the existing SI Portals and defer replacement until the FY26-30 period” is viable but requires duplication of costs across the two distributors, with less opportunity for process improvement.

“Option 3 - Do minimal” defers renewal of the companies’ legacy SI Portals. It therefore represents a risk to the companies’ continued service delivery obligations within the NEM.

1.4. Financial Summary¹

1.4.1 Energex Option Comparison

1.4.2 Ergon Energy Option Comparison

1.4.3 Energex Expenditure Summary (Option 1 – Preferred)

¹ Bracketed figures indicate negative values.

1.4.4 Ergon Energy Expenditure Summary (Option 1 – Preferred)

1.5. Benefits

The preferred option delivers the benefit of sustaining Energy Queensland’s self-service capability for customer information and market operations.

The investment is also a critical enabler of Energy Queensland’s planned productivity improvements which result in a forecast 10% reduction in indirect costs. The consolidation of SI Portals supports this productivity improvement through:

- Provision and use of self-serve capability enables productivity improvement through first-response automation; and
- Agility and synergy in responding to changes in market rules transaction specifications.

1.6. Investment Risks

1.7. Customer Focus

As part of Energy Queensland’s “Customer Xchange and Community Engagement” forums, a number of themes have been identified that directly relate to delivering expected customer outcomes through the SI Portals initiative including:

1. **Products and Services** - enable new technology that is easier to access, intuitive to use and which enables customer choice.
2. **Systems and Processes** - simplify systems and processes, providing optimised channels for customers’ differing needs.
3. **Interactions and Communications** - simplify language and “know our customers”, to improve customer experience and engagement.

Self-service capabilities improve customer choice, while maintaining necessary controls when transacting in the market with Energex and Ergon Energy.

The ability to initiate, monitor and respond in a timely manner provides for a positive customer experience. It also reduces contact centre call volumes and enables productivity improvement in customer connection and outage processes.

2. INVESTMENT OVERVIEW

2.1. Background and History

The Service Interaction Portals (SI Portals) deployed by Energex and Ergon Energy provide web browser based self-service capability to support efficient distributor operations in the National Electricity Market (NEM). The capability was initially introduced for electrical works requests and has been progressively expanded to support broader distributor interactions with customers, electrical service providers and retailers.

The self-service capability is enabled through portal applications accessed via the respective Energex and Ergon Energy websites. The SI Portals were implemented in March 2011 and are key platforms enabling the distributors' compliance with the National Energy Customer Framework (NECF) and Power of Choice (PoC) reform initiatives.

The SI Portals provide the following self-service capabilities to customers, contractors and retailers:

- Customer SI Portal
 - View connection status
 - View service order status
 - Maintain customer details
 - Register a Guaranteed Service Level (GSL) claim
 - Register tree trimming request
 - Report street light outages and other events
- Electrical Contractor / Service Provider SI Portal
 - Initiate connection requests
 - Initiate solar photo-voltaic (PV) requests
 - View service order status
 - View service order history
 - Notify of Service Order status change
- Retailer SI Portal
 - National Metering Identifier (NMI) enquiry
 - View service order status
 - View outage information

This investment will replace the SI Portals with a unified solution utilising contemporary technology. It will also leverage associated "back-end" solution replacements to support consistent state-wide business processes and customer service as described in Energy Queensland's Customer Strategy and Customer Experience Framework.

2.2. Business Problem and Rationale

This SI Portals Consolidation and Replacement initiative primarily responds to the need for a supportable and sustainable platform to service the Energy Queensland distribution customer base.

At the time of the proposed replacement, the SI Portals will have been in service for 13 years². The portals have been developed in-house utilising technology frameworks that provide secure interactions with a range of the distributors' core operational systems (e.g. Customer Information Systems, Workforce Automation Systems and Outage Management Systems). Appendix A provides a high level overview of the interactions involved in the new connections processes.

² The Energex SI Portal was implemented in 2011. The Ergon Energy SI Portal was deployed in 2016, but was based on the existing Energex software.

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



The existing portals require replacement to address the technical obsolescence of the existing platform and the rapid evolution of internet technologies and customer device capabilities. The consolidation and replacement will also enable the deployment of a more extensible platform to support ongoing improvements in participant interactions and market changes.

A complementary outcome of the SI Portal Consolidation and Replacement investment is the opportunity to address the increasing customer service demands that drive the need for a more integrated suite of service channel solutions. The core tenet of the Energy Queensland Customer Strategy is for “customer needs to be the focus of everything we do” and this is underpinned by the Energy Queensland Customer Experience Framework.

The framework focusses on five key areas:

1. State-wide service alignment
2. Understanding of customers
3. Operational excellence
4. Connected employees
5. Improvement and Innovation

Consistent with the Customer Strategy and Customer Experience Framework, it is proposed to leverage the SI Portal Consolidation and Replacement to further support enablement of the unified omnichannel customer experience.

Through this business case proposal, the separate legacy Energex and Ergon Energy SI Portal implementations will be replaced with a unified solution, subject to conformance with security, privacy and ring-fencing obligations. Further, as the energy market continues to evolve, the two Energy Queensland distributors will benefit from associated changes needing to be made in just a single unified solution.

2.3. Investment Objectives

This investment in consolidation and replacement of the SI Portals will deliver on the following objectives.

- Ensure the ongoing supportability and sustainability of core business systems and operational processes.
- Maintain the DNSPs’ obligations to transact within the energy market in a compliant manner.
- Maintain existing portal-based interactions and provide an extensible platform to quickly facilitate enhancements to, and introduction of, new service interactions to meet changing customer service and technology/device expectations, as well as market obligations.
- Consolidate Energex and Ergon Energy’s SI Portals for state-wide process consistency and productivity.
- Provide more relevant and timely information to customers, service partners and retailers in relation to queries, such as loss of supply and status of service requests.
- Deliver a Service Interaction Portal solution that supports a unified omnichannel experience for customers. This will be achieved through leveraging the proposed solution replacements in the customer and market domain during the FY21-25 regulatory period. I.e.
 - ID04 Customer Market Systems Consolidation & Replacement;
 - ID07 Contact Centre Technology Consolidation & Replacement;
 - ID14 Customer Management System Consolidation & Replacement; and
 - ID03 Field Force Systems Consolidation & Replacement.

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



2.4. Principles

This initiative will be guided by the following principles.

- Customer service solutions enable the core business of Energy Queensland and must remain supportable, sustainable and secure, while ensuring compliance with NEM obligations.
- The customer is at the centre of everything that Energy Queensland delivers.
- A seamless and integrated customer experience is provided across all service channels.
- Customer service solutions are cost effective to implement and financially sustainable.

3. STRATEGIC ALIGNMENT

3.1. Alignment to Energy Queensland Strategic Objectives

This investment aligns with the Energy Queensland Strategic Objectives in the following ways:

Strategic Objective	How this investment contributes to the Strategic Objective of EQL	Impact
<p>1. Community and customer focused Maintain and deepen our communities' trust by delivering on our promises, keeping the lights on and delivering an exceptional customer experience every time.</p>	<p>Self-service access to customer, market and outage information supports efficient end-to-end customer service delivery. Enables Energex and Ergon Energy to continue to meet changing customer service and technology/device expectations, as well as market obligations.</p>	High
<p>2. Operate safely as an efficient and effective organisation Continue to build a strong safety culture across the business and empower and develop our people while delivering safe, reliable and efficient operations.</p>	<p>Enables continuous improvement in market interactions and thus improves end-to-end market operations.</p>	Medium
<p>3. Strengthen and grow from our core Leverage our portfolio business, strive for continuous improvement and work together to shape energy use and improve the utilisation of our assets.</p>	<p>Leverages scale across the Energy Queensland businesses to deliver the most cost-effective Service Interactions Portal solution.</p>	Medium
<p>4. Create value through innovation Be bold and creative, willing to try new ways of working and deliver new energy services that fulfil the unique needs of our communities and customers.</p>	<p>Provides self-service capability to customers, service partners and retailers enabling them to interact with Energy Queensland when they choose and via their channel of choice.</p>	Medium

3.2. Alignment with National Electricity Rules (NER)

The table below details the alignment of the proposed solution with the NER capital expenditure objectives as regulated by the AER.

NER Objective Alignment	Rationale
<p>6.5.7 (a) (2) The forecast capital expenditure complies with all applicable regulatory obligations or requirements associated with the provision of standard control services</p>	<p>This business case will consolidate Energex and Ergon Energy's SI Portals into a unified platform servicing the whole of Energy Queensland for ongoing sustainability, supportability and security. Through this consolidated platform, customers, retailers and electrical partners will be able to undertake self-service interactions ensuring compliance with all regulated, legislative and policy obligations for interaction across the NEM.</p>
<p>6.5.7 (a) (3) The forecast capital expenditure maintains the quality, reliability and security of supply of standard control services</p>	<p>The SI Portal solution is critical to Energex and Ergon Energy's ability to support market operations through the provision of self-service capability to NEM participants, enabling timely initiation, monitoring and reporting of service requests, particularly including the standard control service connections and outage processes.</p>

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



NER Objective Alignment	Rationale
<p>6.5.7 (c) (1) (i) The forecast capital expenditure reasonably reflects the efficient costs of achieving the capital expenditure objectives</p>	<p>Costs for this investment have been forecast based on knowledge of the SI Portal deployments completed in 2012 and 2016, other recent procurement activities, as well as through specialist advice and internal subject matter expertise.</p> <p>Energy Queensland undertakes competitive market procurement processes to ensure efficiency in project cost and operational expenditure.</p> <p>Energy Queensland also has a cloud services strategy which assesses each potential investment to ensure the optimal use of cloud and internal services with considerations of cost, risk, service requirements and other parameters.</p>
<p>6.5.7 (c) (1) (ii) The forecast capital expenditure reasonably reflects the costs that a prudent operator would require to achieve the capital expenditure objectives</p>	<p>The requirement for this investment is premised on industry typical ICT Asset Lifecycle Management principles to prudently and efficiently ensure the supportability, serviceability and security of Energy Queensland SI Portal capabilities.</p> <p>Currently this investment has been analysed to a "Preliminary Gate 2" level. Prior to investment, a Gate 3 business case will be prepared with further detail to be assessed in accordance with the established investment governance processes.</p>
<p>6.5.7 (c) (1) (iii) The forecast capital expenditure reasonably reflects a realistic expectation of the demand forecast and cost inputs required to achieve the capital expenditure objective</p>	<p>Costs for this investment have been forecast based on knowledge of the SI Portal deployments completed in 2012 and 2016, other recent procurement activities, as well as through specialist advice and internal subject matter expertise.</p> <p>Further detailed cost build-up will take place in development of the Gate 3 business case. This detailed cost build up may be subject to further competitive market procurement processes, sourcing analysis and peer consultation.</p>

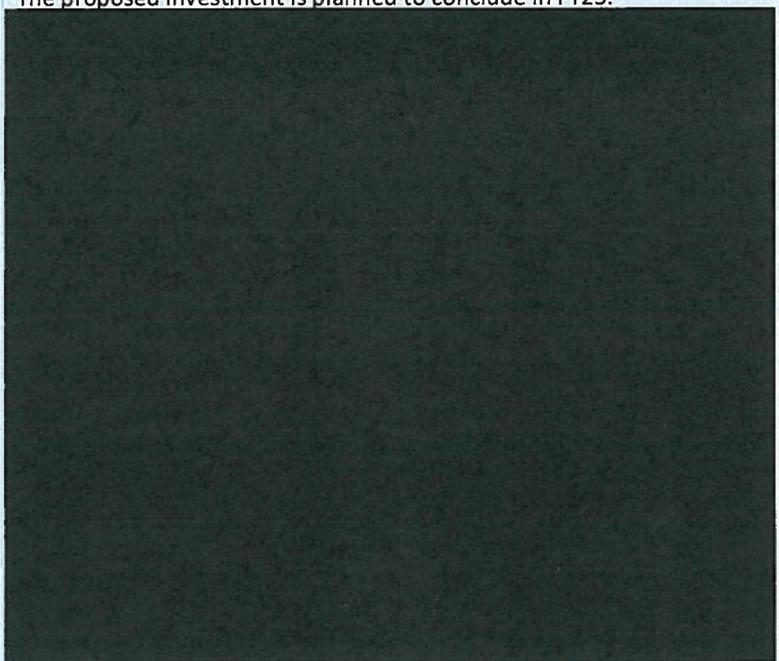
Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



3.3. Alignment with the Digital Office Application Asset Management Guidelines

The table below indicates alignment of the solution with the **Digital Application Asset Management Guidelines**:

Digital Application Asset Management Guidelines Assessment	Rationale
<p>The SI Portals are classified as Systems of Differentiation according to the PACE layer categorisation described in Energy Queensland’s Digital Application Asset Management Guidelines.</p> <p>These guidelines state a System of Differentiation has the following key defining criteria:</p> <ul style="list-style-type: none"> • Supports a differentiating and new business process. • Business process is understood & dynamic (improved ways to deliver existing outcomes). • Utilises information that is core to the business and other information that is sourced externally or generated as part of the process. • Moderate data integrity requirements (data needs to validate transaction but not necessarily be auditable). <p>On the above basis, the guidelines forecast that Systems of Differentiation should maintain currency, supportability and effectiveness through the following investment lifecycle.</p> <ul style="list-style-type: none"> • Minor Upgrade – 2 years after implementation • Major Upgrade – 5 years after implementation • Replacement – 7 years after implementation <p>The guidelines further describe that Upgrade and Replacement investments should consider the extent of “obsolescence” of the solution. E.g.</p> <ul style="list-style-type: none"> • Technical Obsolescence – The solution is still functional but not supportable • Financial Obsolescence – The cost of maintaining the solution outweighs the value derived from it. • Asset Obsolescence – The asset has reached the end of its reasonable functional life as indicated through failure rates, inability to meet business requirements etc. 	<p>The SI Portals proposed for renewal through this investment will meet the criteria for replacement identified in the guidelines.</p> <p>The proposed investment is planned to conclude in FY25.</p> 

3.4. Regulatory Implications

A robust and reliable SI Portal is essential to the delivery of Energex and Ergon Energy's statutory and regulatory obligations including:

- Market processing obligations associated with Business to Business (B2B) transactions as a Local Network Service Provider (LNSP) market participant in the NEM.
- Privacy obligations, requiring strong controls and security on the accessibility and release of data.
- NECF obligations including:
 - Life support customer service;
 - Outage Management Notifications; and
 - Adherence to GSLs.

4. INVESTMENT SCOPE

4.1. Functional Scope

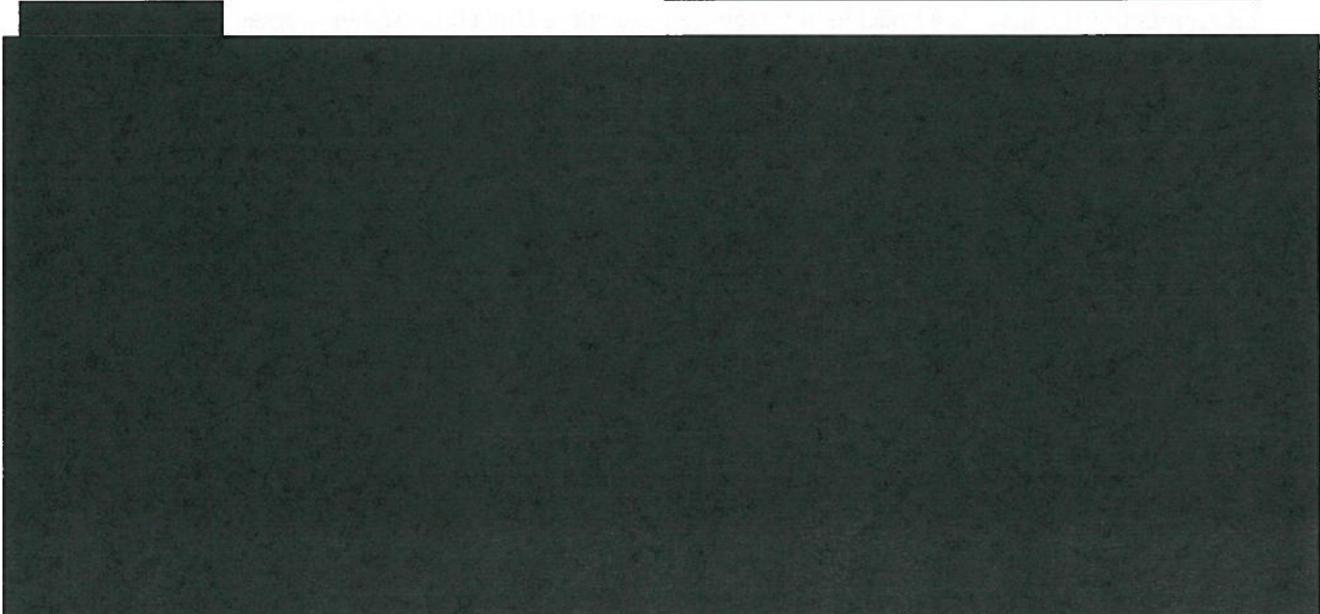
Energy Queensland comprises multiple business areas and functions as defined in the organisation’s Business Reference Model. The proposed investment in SI Portal Consolidation and Replacement is essential for the ongoing efficient customer service delivery through the Energy Queensland’s business areas and functions listed below.

Business Area	Business Function	Business Reference Model Description
Market Management	Market Interaction Coordination	A function to facilitate the interaction between B2B organisations (LNSP, NSP, Retailers, Generators, AEMO, MDAs, MDPs) in the supply chain to deliver the product/service to the consumer. I.e. to satisfy needs of the consumer.
	Market Operations	A function to operate the physical systems and wholesale markets through managing input data used to prepare schedules and dispatches.
Customer Management	Customer Service Operations	A function that manages service requests from customers. This includes the handling of customer requests, enquiries and complaints. Sub functions of this function are touch points between Customer Sales Management and Connection Point Management.

4.2. Solution Overview

4.2.1 Current State (2018)

Energex and Ergon Energy operate independent SI Portals, providing self-service capability to customers (residential and major), electrical partners and retailers. [REDACTED]

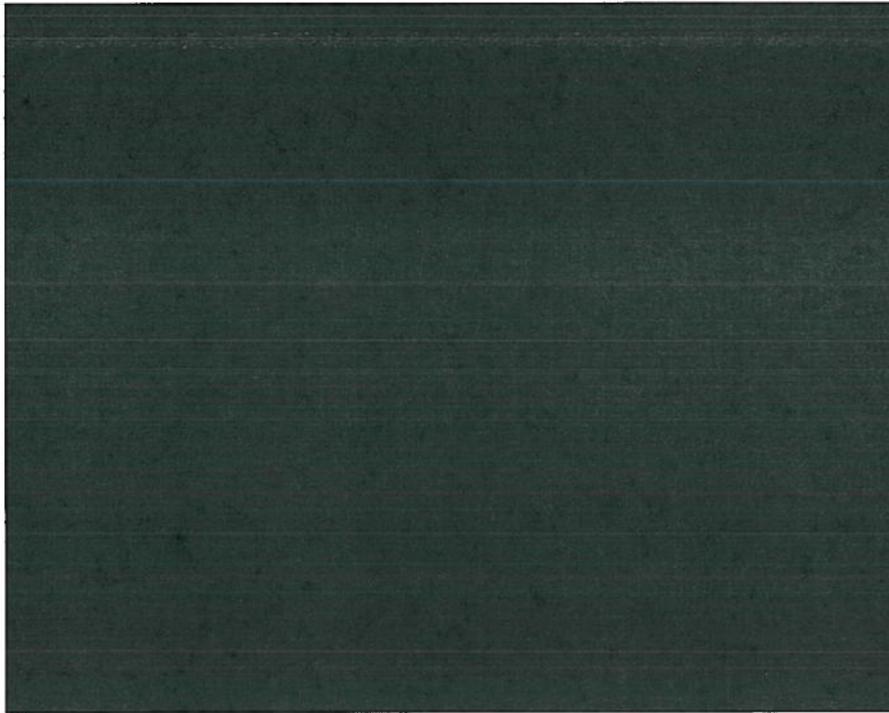


The portals are accessed from the respective distributors’ internet sites and require appropriate registration to enable access.

While they provide similar levels of self-service capability to the respective parties in their interactions with Energex and Ergon Energy, there are a range of underlying business process differences.

4.2.2 Target State (end of the proposed investment)

This business case investment will replace the legacy SI Portals for long term sustainability, supportability and security. [REDACTED]



Replacement of the existing SI Portals will provide the opportunity to align business processes to deliver a consistent experience for Energex and Ergon Energy's customers, electrical partners and retailers.

The solution will leverage improvements in portal technology and take advantage of the consolidation and replacement of the associated back-end systems including the Unified Customer Market Solution³ and the Unified Field Force Automation (FFA) Solution⁴.

Through this consolidation and replacement, the SI Portal will continue to meet customers' and partners' service expectations consistent with market obligations and Energy Queensland's customer strategy.

4.3. Assumptions

This business case is based on the following assumptions.

- The scope, inclusions, exclusions, costs and impacts of the initiative will be further detailed through the Gate 3 business case prior to investment. This may be subject to competitive procurement processes as appropriate to ensure cost efficiency of delivery.
- The initiative will be delivered consistent with the:
 - Customer Strategy and Customer Experience Framework; and
 - Consolidation and simplification of the overarching systems architecture.
- The product offerings in the market are sufficiently mature and the product vendor's intellectual property enables effective implementation of best practice business processes and supporting capability.

³ See business case ID04 Customer Market Solution Consolidation & Replacement.

⁴ See business case ID03 FFA Consolidation & Replacement.

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



4.4. Dependencies

This investment is dependent on the following programs, projects or business activities:

Program/Project	Dependency	Effect
ID04 Customer Market Solution Consolidation & Replacement	The consolidated Customer and Market solution will be a significant integration point for the SI Portal. These initiatives are scheduled in sequence with ID04 completing as ID09 commences.	<p>Completion of the Customer Market Solution Consolidation & Replacement will provide a stable platform upon which the replacement SI Portal can be integrated.</p> <p>The SI Portals could be replaced prior to ID04 Customer Market Solution Consolidation & Replacement, but costs would be greater given the need to integrate with two legacy systems and then subsequently re-integrate when ID04 is completed.</p>
ID14 Customer Management Systems (CMS) Consolidation & Replacement	The CMS replacement initiative is scheduled to commence in advance of the SI Portal solution and represents a potential integration point for the SI Portal.	The SI Portals could be replaced prior to ID14 CMS Consolidation & Replacement, but costs would be greater given the need to integrate with two legacy systems and then subsequently re-integrate when ID14 is completed.
ID18 Internet Website Consolidation & Replacement	<p>The SI Portal is structured within the respective distributors' internet sites which are scheduled for replacement.</p> <p>The ID18 replacement initiative is scheduled to complete well in advance of this initiative (ID09).</p>	The SI Portals could be replaced prior to ID18 Internet Website Consolidation & Replacement, but costs would be greater given the need to integrate with two legacy websites and then subsequently re-integrate when ID18 is completed.
ERP EAM Program	<p>The initiative will be dependent of a range of outcomes from the ERP EAM Program including:</p> <ul style="list-style-type: none"> • That ERP EAM program delivers to its proposed scope and schedule • Availability of the ERP, Asset and Works Management SMEs and solutions experts to ensure consistency and alignment of the end state business processes and solution. 	The successful completion of the ERP EAM Program will enable the series of proposed investments in Customer and Market capability to proceed in the next regulatory period, leveraging the core ERP/EAM foundation.
Brand Strategy and Implementation	The SI Portal solution is dependent on decisions related to the Energy Queensland branding strategy.	The way the Energex and Ergon Energy brands are presented to the customer will drive a range of configuration items as part of the SI Portal replacement. Having branding decisions resolved will avoid rework to incorporate changes at a later date.

5. OPTIONS ANALYSIS

This section considers the following options analysis:

- Option 1 – Proceed with the SI Portal Consolidation and Replacement (Preferred)
- Option 2 – Upgrade the existing SI Portals and defer replacement until the FY26-30 period
- Option 3 – Do minimal

5.1. Option 1 – Proceed with the SI Portal Consolidation and Replacement (Preferred)

The existing SI Portals will be replaced for ongoing sustainability, supportability and security. Further consolidation and alignment of business process will be implemented to maximise synergies across Energy Queensland's customer service operations.

5.2. Option 2 – Upgrade the existing SI Portals and defer replacement until the FY26-30 period

The existing SI Portals will undergo a technology upgrade, including any required portal application remediation in the FY21-25 regulatory period and then the solutions will be locked down with minimal change until replacement occurs late in the FY26-30 regulatory period.

5.3. Option 3 – Do minimal

The existing SI Portals will be locked down with minimal change [REDACTED] until replacement occurs early in the FY26-30 regulatory period.

A comparison of these options is provided over page.

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



5.4. Option Comparison

Each option has been assessed against key assessment criteria contained in the table below.

Assessment Criteria	Option 1 - Proceed with the SI Portal Consolidation and Replacement (Preferred)	Option 2 - Upgrade the existing SI Portals and defer replacement until the FY26-30 period	Option 3 – Do Minimal
Advantages	<p>Consistent with the business case objectives, this option:</p> <ul style="list-style-type: none"> Ensures the ongoing supportability and sustainability of core business systems and operational processes. Maintains the DNSPs' obligations to transact within the energy market in a compliant manner. Maintains existing portal-based interactions and provides an extensible platform to quickly facilitate enhancements to, and introduction of, new service interactions to meet changing customer service and technology/device expectations, as well as market obligations. Consolidates Energex and Ergon Energy SI Portals for state-wide process consistency and productivity. Provides more relevant and timely information to customers, service partners and retailers in relation to queries, such as loss of supply and status of service requests. Delivers a Service Interaction Portal solution that supports a unified omnichannel experience for customers. 	<p>Partly consistent with the business case objectives, this option:</p> <ul style="list-style-type: none"> Achieves a level of supportability and sustainability of core business processes for a period of time before transitioning to an end-of-life support state. Is likely to maintain the DNSPs' obligations to transact within the energy market in a compliant manner. 	<p>This option does not effectively achieve any of the objectives of the business case.</p> <p>It does however represent the lowest near-term expenditure on SI Portals by deferring investment into the FY26-30 period.</p>

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Assessment Criteria	Option 1 - Proceed with the SI Portal Consolidation and Replacement (Preferred)	Option 2 - Upgrade the existing SI Portals and defer replacement until the FY26-30 period	Option 3 – Do Minimal
Disadvantages	<p>This option meets all the objectives of the business case. However, the following disadvantage is recognised:</p> <ul style="list-style-type: none"> Internet and web technologies continue to evolve rapidly. Therefore, investments in this capability have a shorter life than other ICT systems. <p>Nevertheless, self-service customer and partner interaction are essential for Energex and Ergon Energy to operate at planned productivity levels.</p> <p>It is also essential to continue investment in internet solutions (including SI Portals, websites and apps) to keep up with evolving end-user technologies, including smartphones, web browsers and the next generation of these types of technologies.</p>	<p>This option does not meet the following objectives of the business case:</p> <ul style="list-style-type: none"> Does not consolidate the SI Portals onto a single platform which supports process alignment and efficiencies across the Energy Queensland business. Therefore, this option does not support the forecast Energy Queensland 10% reduction in indirect costs. Does not provide an extensible platform to quickly facilitate enhancements to, and introduction of, new service interactions to meet changing customer service and technology/device expectations, as well as market obligations. Does not provide more relevant and timely information to customers, service partners and retailers in relation to queries, such as loss of supply and status of service requests. Does not deliver a Service Interaction Portal solution that supports a unified omnichannel experience for customers. 	<p>This option does not meet any of the business case objectives and puts the core market operations of Energex and Ergon Energy at risk. This is therefore an unacceptable option.</p> <p>This option does not support the forecast Energy Queensland 10% reduction in indirect costs. This will impact the companies' FY26-30 revenue requirements, resulting in a negative price outcome for customers.</p>

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Assessment Criteria	Option 1 - Proceed with the SI Portal Consolidation and Replacement (Preferred)	Option 2 - Upgrade the existing SI Portals and defer replacement until the FY26-30 period	Option 3 – Do Minimal
<p>Key Identified Risks</p> <p>As the “preferred option”, a specific implementation risk assessment is detailed in section 10.2. Key amongst these risks are:</p> <ul style="list-style-type: none"> • Resource capacity and availability – mitigated through the use of market-provisioned services and established practices, tools and techniques. • Concurrent NEM changes – mitigated through planning, as well as recognition of the need to facilitate NEM changes in the existing solutions during the project, as well as applying the changes into the target solution. 	<ul style="list-style-type: none"> • Heightened risk of business continuity interruption as SI Portals move into an “end-of-life” support state. • The ability to quickly respond to evolving customer and market changes will remain low and presents ongoing risk to meeting market obligations. • Energy Queensland alignment efficiencies are minimal, making it more difficult to achieve financial performance targets. 	<p>See the organisational risk assessment in section 10.1 for information.</p>	

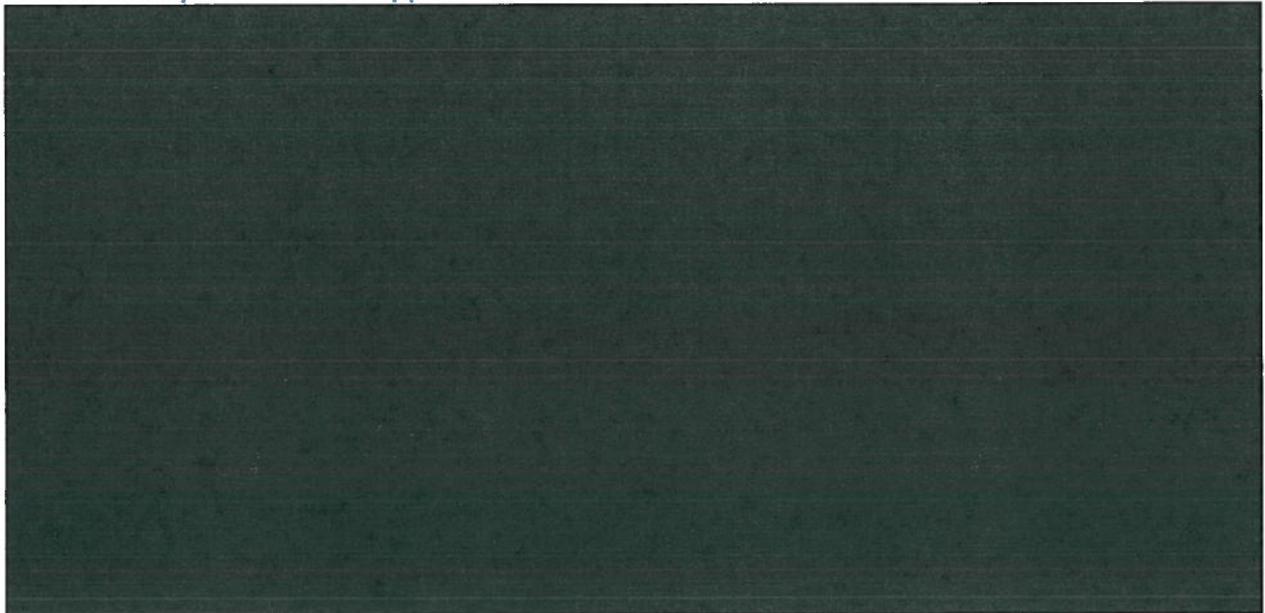
6. PREFERRED OPTION

“Option 1 - Proceed with the SI Portal Consolidation and Replacement” is the preferred option, as it meets all the business case objectives, it is aligned with Energy Queensland’s strategic objectives and is consistent with Energex and Ergon Energy’s obligations under the National Electricity Rules.

“Option 2 - Upgrade the existing SI Portals and defer replacement until the FY26-30 period” is viable but requires duplication of costs across the two distributors, with less opportunity for process improvement.

“Option 3 - Do minimal” defers renewal of the companies’ legacy SI Portals. It therefore represents a risk to the companies’ continued service delivery obligations within the NEM.

6.1. Delivery Timeline and Approach



Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



7. INVESTMENT BENEFITS OVERVIEW

This section outlines the benefits associated with the investment. This business case has currently been analysed to a “Preliminary Gate 2” level. As such, the benefits will be further detailed, tested, and verified in preparation of the Gate 3 business case prior to investment.

This initiative is primarily an ICT Asset Replacement of legacy systems, required to ensure the ongoing sustainability, supportability and security of business critical capability. Energy Queensland will leverage the opportunity associated with this ICT replacement to also enable planned productivity improvements, resulting in a forecast 10% reduction in indirect costs. The benefits listed below represent contributions to the overall Energy Queensland productivity improvement targets.

7.1. Financial and Other Benefits

Area	Benefits Identified	Value
Financial Benefits		
Customer Operations Productivity	Provision and use of self-serve capability enables productivity improvement through first-response automation.	[REDACTED]
Compliance Productivity	Agility and synergy in responding to changes in market rules transaction specifications.	
Other Benefits		
ICT Asset Management	Sustainment of the companies’ SI Portals for ongoing supportability, serviceability and security. Failure or extended outages of the current solution outages would have significant customer, financial and reputational impacts.	Sustainment
Technology Advances	Flexibility in enabling service interactions through new and changing technologies. This includes stakeholder-expected support for new smartphones, web browsers and other technologies which gain prevalence in the coming 7 years.	Stakeholder Expectations
Customer	Agility, enabling Energy Queensland to be more responsive to changing customer interaction demands and expectations.	
Electrical Partners & Retailers	Agility, enabling Energy Queensland to be more responsive to changing business practices.	

8. FINANCIAL ANALYSIS

8.1. Scope of Costs

The table below summarises the potential cost inclusions to deliver the outcomes described in this business case.

Phase	Description / Rationale
All Phases	Project management
	Project support
	Internal corporate logistics / overheads
	Communications and engagement
	Review and assurance (excluding normal Internal Audit functions)
Planning & Procurement Phase	Tender facilitation, probity management and legals
	Gate 3 business case development
	Development of planning deliverables (e.g. PMP, Stakeholder and Communications Plan etc)
	Software licences, hardware purchases, cloud services procurement
Design Phase	Software, infrastructure and information design
	Data profiling and migration design
	Solution architecture
	Integration design
	Business process design
	Organisational change design and change management planning
Build, Integrate, Test and Deploy Phase	Data migration and ETL (Extract, Transform, Load) build
	Data migration execution (incl. Trial Migrations, Dress Rehearsals, Verification etc)
	Software, infrastructure and environment configuration
	Integration build
	Business process design and organisational change implementation
	Testing (incl. information consistency, capacity, performance and load, security etc)
	Training
	Production deployment
Warranty Phase	Post implementation operational support
	Transition to business-as-usual (BAU) support
	Post implementation review

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



8.2. Cost Assumptions

The table below summarises the key cost assumptions for the initiative.

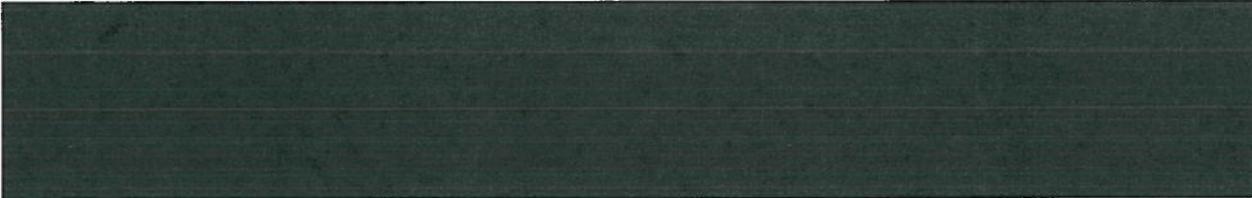
#	Assumption	Description / Rationale
1	Project phasing and deployment	The initiative will be delivered over an 18 month elapsed period with an up-front design phase followed by multiple staged deployments. The deployment plan will be structured with consideration of: <ul style="list-style-type: none"> • Alignment with other dependent initiatives. • Sequencing to maximise business performance benefit. • Intention to progressively transition to the new solution through a sequence of capability deployments.
2	Use of market services	The initiative will be delivered through a team comprising internal subject matter experts and external solution delivery specialists, to ensure project cost efficiency and mitigation of project risk. It is assumed that the project will be able to procure suitably skilled and experienced resources from the market and that these resources can be retained for the duration of the project.
3	Energex and Ergon Energy costs	The project costs for Energex and Ergon Energy are consistent with the effort and complexity of transitioning each company from their respective current state to the common target state. The respective estimates (CapEx and OpEx) are as described in the section below.
4	Availability of corporate ICT environments	The project costs are based on corporate ICT environments being available to facilitate end-to-end testing across the enterprise.
5	Regulatory environment	The project costs are based on there being no significant changes (up to and during the period of implementation) within the regulatory frameworks that impact the customer and market environment.
6	Addition software licencing	Integration with the core ERP/EAM solution will not require additional third-party licencing costs to be incurred.
7	Option 2 (Upgrade the existing SI Portals and defer replacement until the FY26-30 period)	
8	Option 3 (Do minimal)	

8.3. Financial Summary⁵

8.3.1 Energex Option Comparison



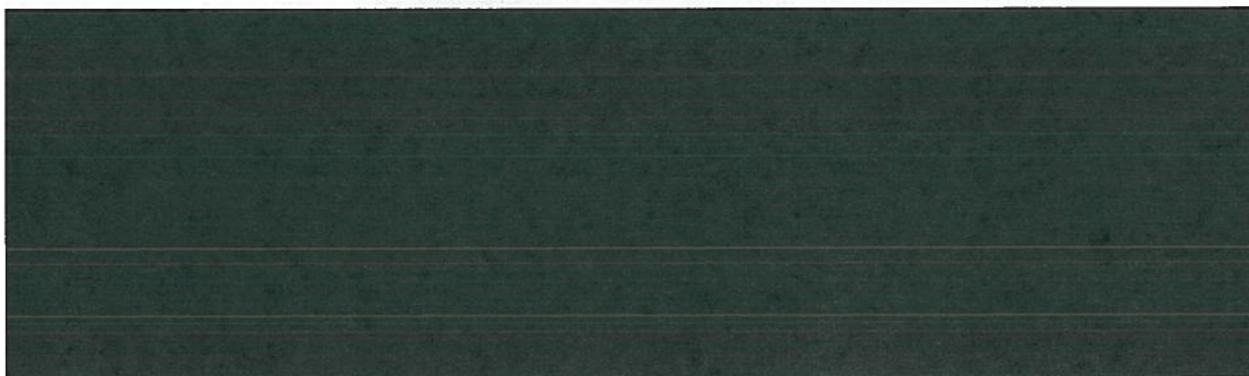
8.3.2 Ergon Energy Option Comparison



8.3.3 Energex Expenditure Summary (Option 1 – Preferred)



8.3.4 Ergon Energy Expenditure Summary (Option 1 – Preferred)



8.4. NPV Calculation Parameters

The above NPV and financial calculations are based on the following parameters.

- The Energy Queensland Net Present Value (NPV) model has been used to calculate the NPV calculations for this business case.
- The financial analysis has been based over a 10 year period after an 18 month phased implementation period.
- 5.40% Regulated Rate of Return/WACC is applied with present values discounted to FY17/18.

⁵ Bracketed figures indicate negative values.

9. PROGRAM DELIVERY

9.1. Program Governance & Delivery

The governance and delivery model depicted in Figure 3 (below) is planned to be used for delivery of the initiative.

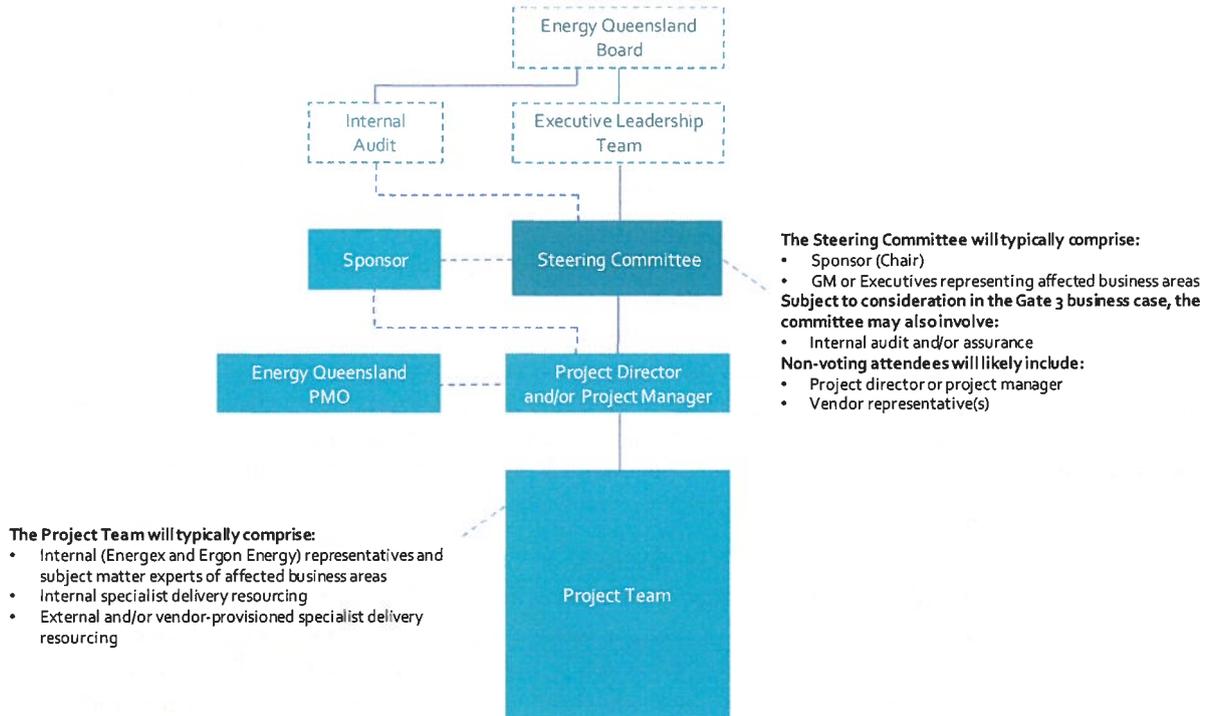


Figure 3 Governance and delivery model

Role	Key Accountabilities
Steering Committee	<p>Provides a single point of accountability for delivery of the initiative in accordance with the business case, as well as decision making aligned with strategic directions of the company. The committee governs the initiative with appropriate balance between delivered outcomes (time, fitness for purpose, cost), risk, business impact and enabled business value.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Attend and be an active participant in committee meetings • Foster positive communications outside of the committee regarding the initiative • Be the voice of the initiative, including communications where appropriate to the Group Executive, Energy Queensland Board and other key stakeholders • Review and approve/reject any request for change (change requests) to the agreed scope, budget, schedule or deliverables. • Ensure all approved change requests align with the program objectives • Ensure program quality outcomes are balanced with other competing priorities • Review each completed phase (or defined stages or gates) and provide go/no-go direction after consideration of quality, risk, cost and schedule • Undertake a Post Implementation Review (PIR) • Ensure the appropriate independent auditing and review of the program is undertaken at the logical stage gates of the program

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Role	Key Accountabilities
Sponsor	<p>The Sponsor is accountable for delivering the business value enabled by the initiative and meeting the objectives set through the business case.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Oversee development of the business case • Oversee development of the project management plan (PMP) working closely with the Project Director • Monitor and advise on delivery outcomes working closely with the Project Director and/or Project Manager • Ensure that any proposed changes of scope, cost or delivery timeline are checked against possible impacts to program benefits • Approve Change Requests within delegated authority levels • Ensure Change Requests have been endorsed by all impacted parties (Business Change, Design, Delivery, Finance, BAU) • Brief Executives and Board on program progress • Ensure that the benefits realisation plan is realistic and achievable
Project Director and/or Project Manager	<p>The Project Director and/or Project Manager has responsibility for the delivery of the overall initiative while maintaining the balance of competing priorities and alignment with initiative objectives as specified in the business case and as directed by the Steering Committee.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Deliver the overall initiative outcomes • Agree delivery strategies with the Sponsor and the Steering Committee • Develop the PMP and oversee specification of all initiative deliverables including assessment of interdependencies and appropriate sequencing across the initiative • Manage development of the communications plan and ongoing communications with guidance and feedback from key stakeholders • Manage mobilisation of the initiative, including resource provision and procurement • Oversee technical delivery of solution design, development, implementation, integration, testing and data conversion • Oversee the delivery of training, deployment, organisational change management and business process re-engineering • Resolve all issues concerning project plans, schedules, budgets, risks and issues as they relate to the initiative • Manage cross-project dependencies, scope and resourcing issues • Ensures audit feedback is actioned in a timely, verifiable manner and validated
Program Management Office	<p>The Program Management Office is a centralised Energy Queensland business function which provides coordination, standards, administrative support and end-to-end reporting for Energex and Ergon Energy's business transformational and ICT initiatives.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide a central repository and framework for all program and project issues and risks • Co-ordinate and manage all project plans under guidance from the Project Managers and/or Project Directors • Overall program / project risk mitigation management • Overall program / project issue management • Program financial tracking and reporting • Deliverables monitoring • Program key performance monitoring and reporting

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Role	Key Accountabilities
Project Team Members	<p>The Project Team undertakes the core delivery of the project under direction of the Project Director and/or Project Manager. The team typically comprises internal representatives and subject matter experts of affected business areas as well as internal and vendor-provisioned delivery resourcing.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Develop and deliver assigned project deliverables • Identify issues and record, monitor and report status • Manage issues with appropriate actions • Escalate issues as required • Attend reference groups and other forums as required

9.2. Stakeholder Management

The following tables summarise the key internal and external stakeholders for the investment. A detailed stakeholder management plan will be developed as part of delivery planning for the initiative.

9.2.1 Key Internal Stakeholders

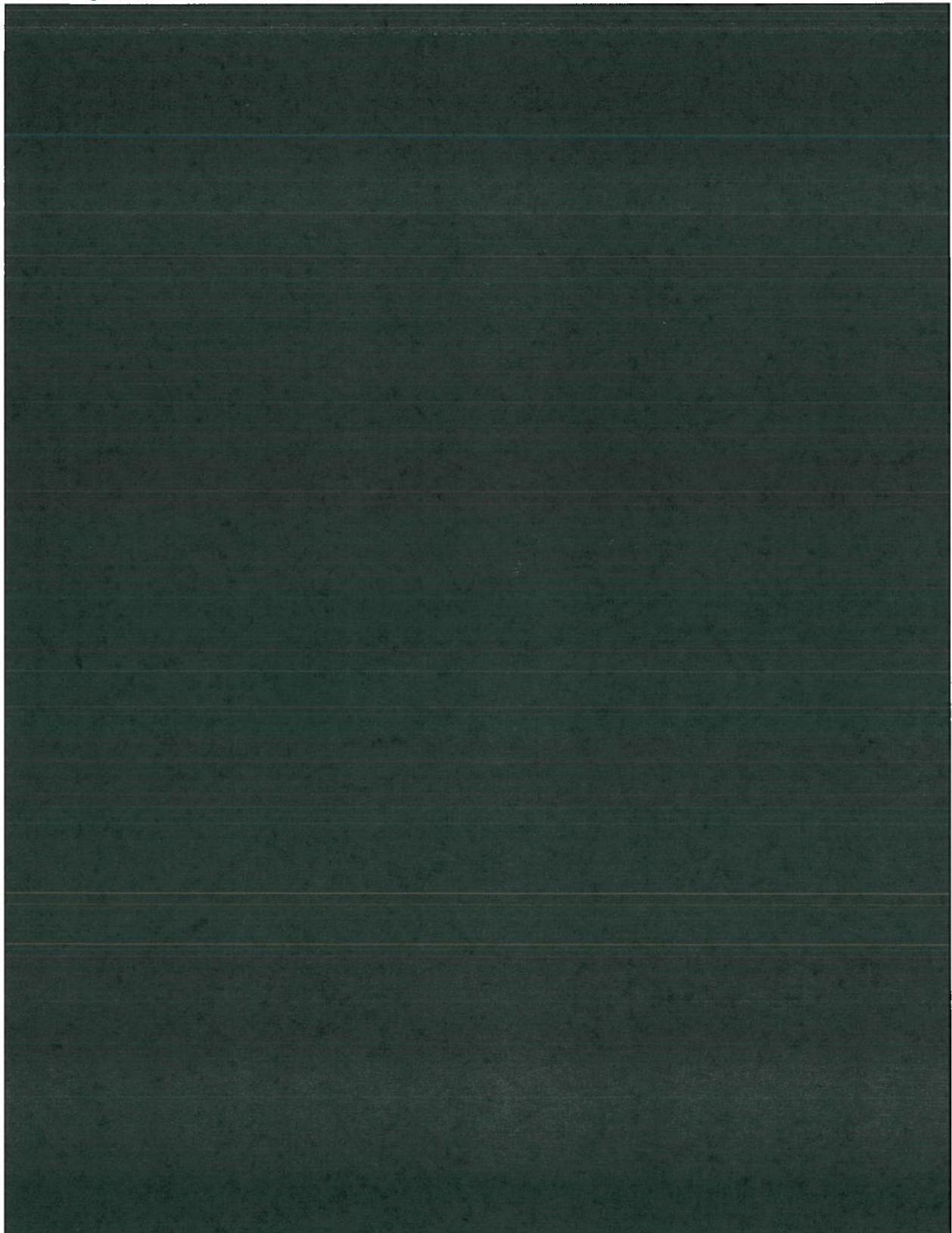
Stakeholder	Interest
Energy Queensland Executive Leadership Team (ELT) and Board	Operational performance outcomes across market operations and customer service delivery.
Energex & Ergon Energy Customer Service and Market Operations Business Unit leaders	Availability, reliability and serviceability of the replacement solution. Effectiveness of the consolidated replacement solution to provide equivalent self-service capability and enhanced capability to easily create future service interaction workflows in support of further efficiencies and market changes.

9.2.2 Key External Stakeholders

Stakeholder	Interest
Shareholder	Performance effectiveness of SI Portals in meeting market compliance obligations, minimum service standards for the connections process and other service requests.
Customers	Customers rely on the Customer SI Portal to support the connection and outage processes.
Retailers	Retailers rely on the Retailer SI Portal to support the connection process, monitor service order status, appointment bookings and NMI enquiry.
Contractors and Electrical Partners	Contractors and Electrical Partners rely on the Electrical Partner SI Portal for effective support of the connection process.

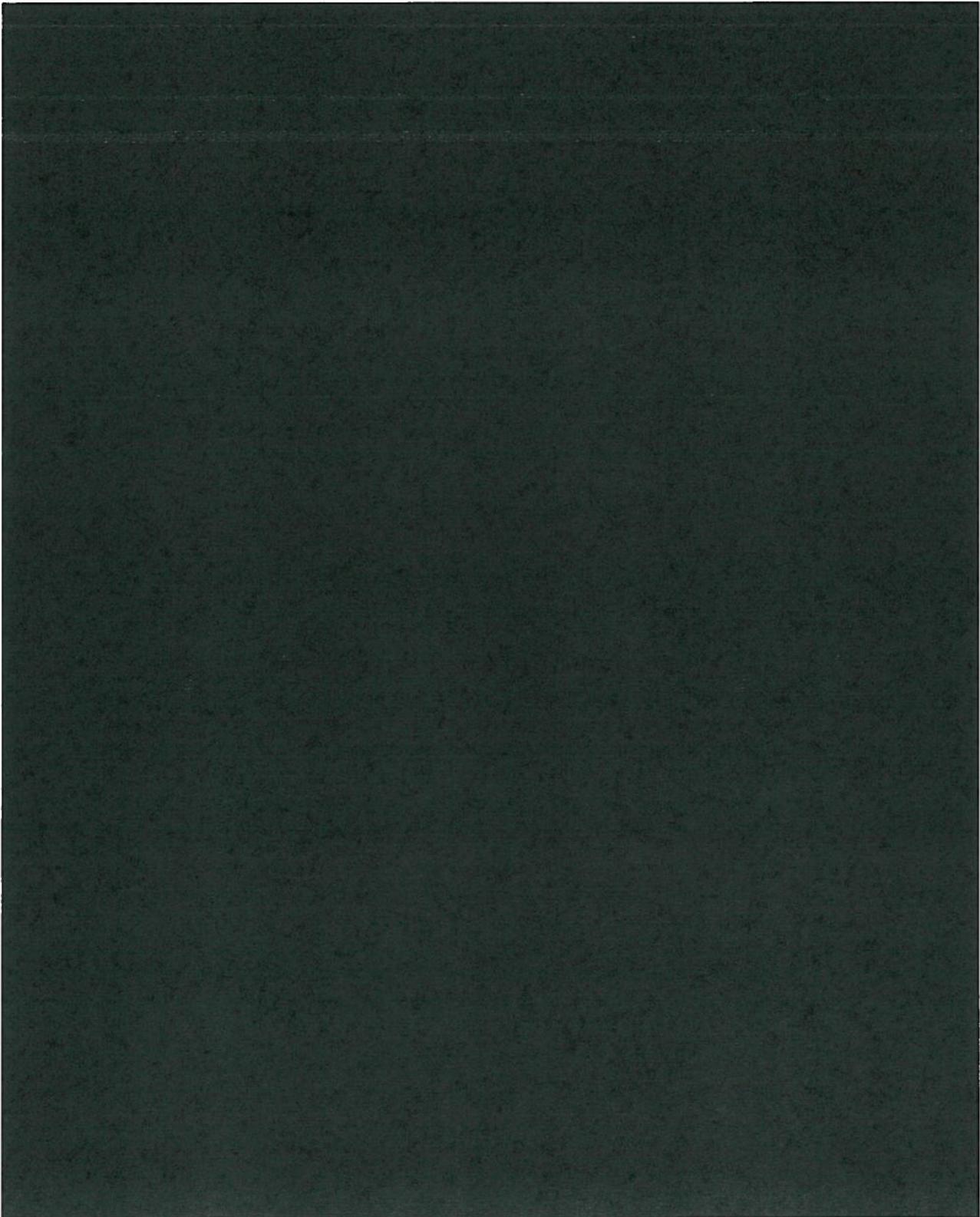
10. RISK ASSESSMENT

10.1. Organisational Risk Assessment



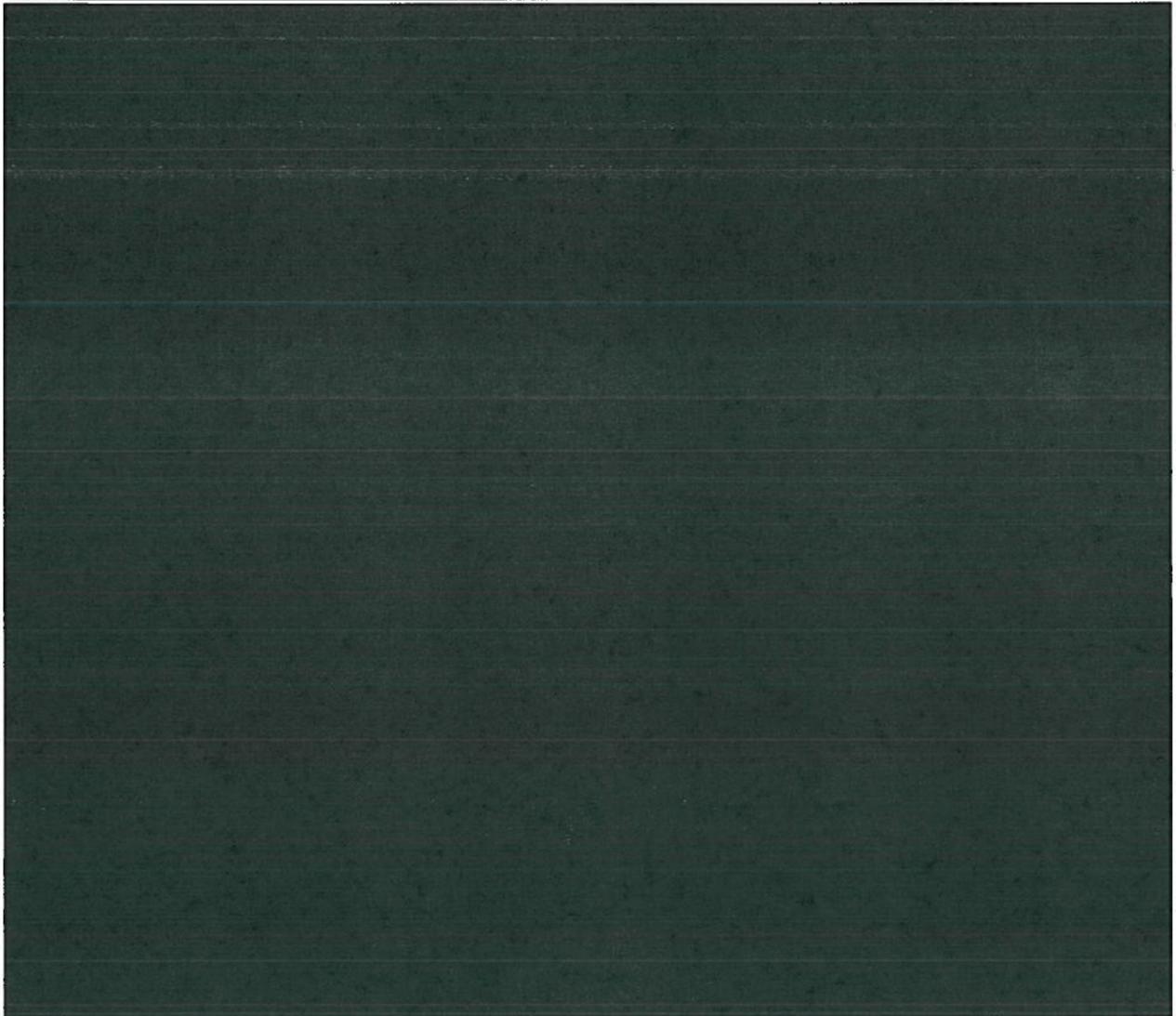
Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



10.2. Preliminary Implementation Risk Assessment

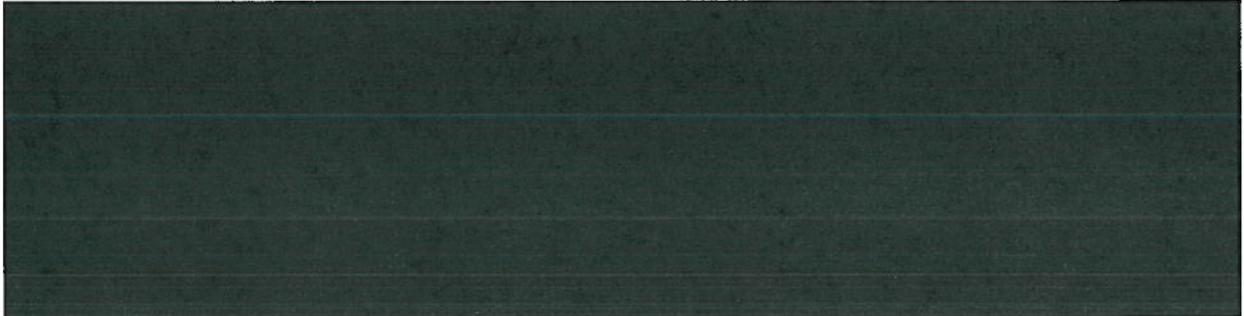
This section provides a preliminary assessment of the key implementation risks of the preferred investment option. These risks will be managed and mitigated by standard program controls and therefore have significantly reduced likelihood of occurring.

Risk Description	Inherent risk	Planned Mitigation	Residual risk
<p>Risk 1. Resource capacity and availability</p> <p>The initiative requires mobilisation of a skilled delivery team comprising internal subject matter experts and external solution delivery specialists.</p> <p>The required internal subject matter experts may be limited in capacity due to other initiatives and organisational change.</p> <p>Availability of required external solution delivery specialists is dependent on the capacity of the market.</p>	Moderate	<p>Continue to perform prudent program management planning to minimise internal resourcing conflicts, ensuring adequate capacity is committed to each initiative prior to delivery.</p> <p>Also prior to delivery, verify the availability of external solution delivery expertise through market procurement processes.</p>	Low
<p>Risk 2. Concurrent NEM changes</p> <p>It is probable that the project will need to incorporate new market changes in the existing and replacement solutions during the delivery timeframe of the initiative.</p>	Moderate	<p>Plan for market changes upfront, recognising the need to facilitate these changes in the existing solutions during the project, as well as applying the changes into the target solution.</p>	Low
<p>Risk 3. Program Interdependencies</p> <p>There are a number of related system upgrades and/or replacements that have been sequenced to minimise risk and duplication of effort. With an overall program of this magnitude variations are highly probable.</p>	Moderate	<p>Perform prudent program delivery management using the centralised Energy Queensland Program Management Office (PMO) function with consistent work practices and oversight.</p>	Low

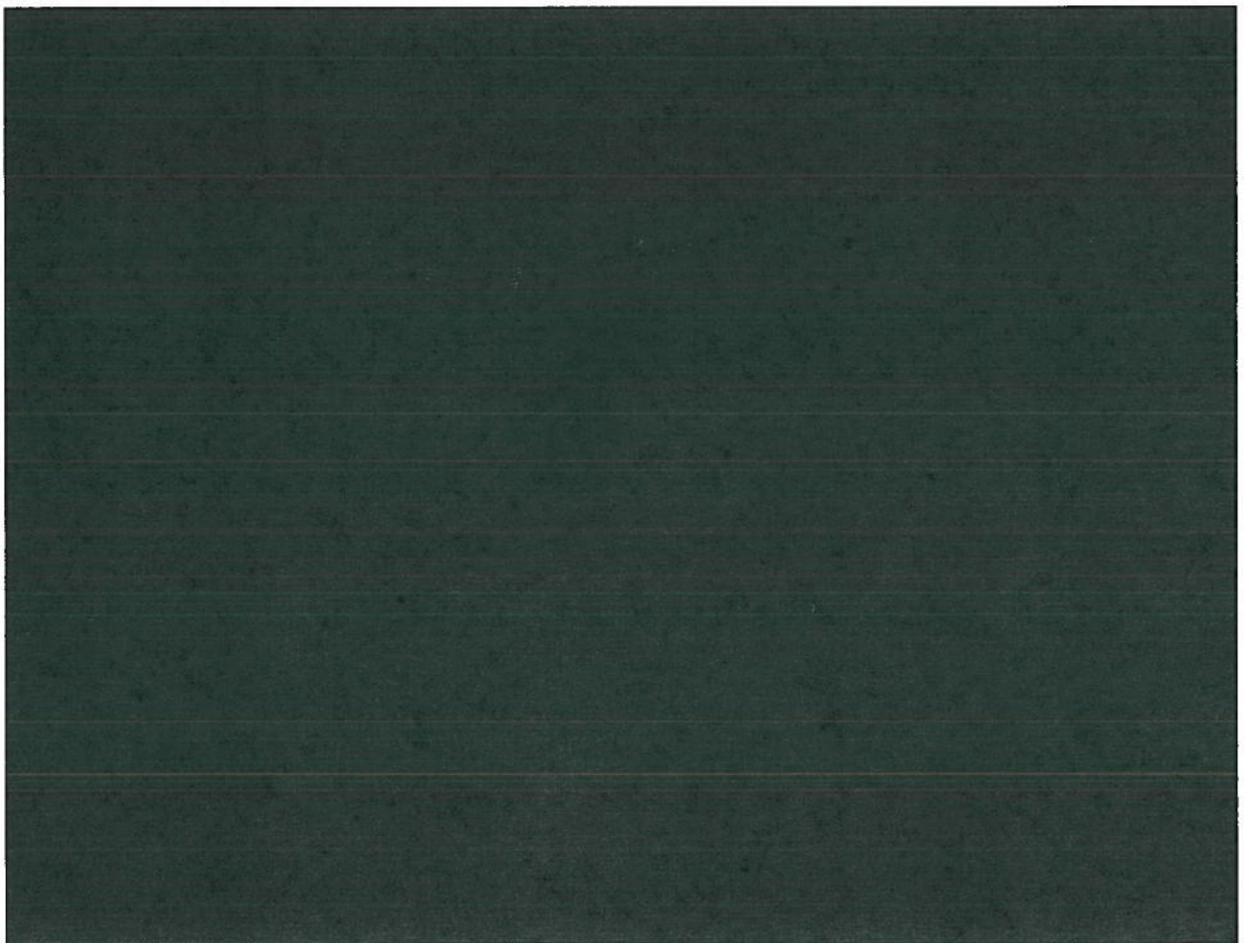
11. CHANGE IMPACTS

The below section details the potential impacts to occur across the Energy Queensland environment during and after the implementation of this investment.

11.1. Investment System Impacts



11.2. People & Process Impacts

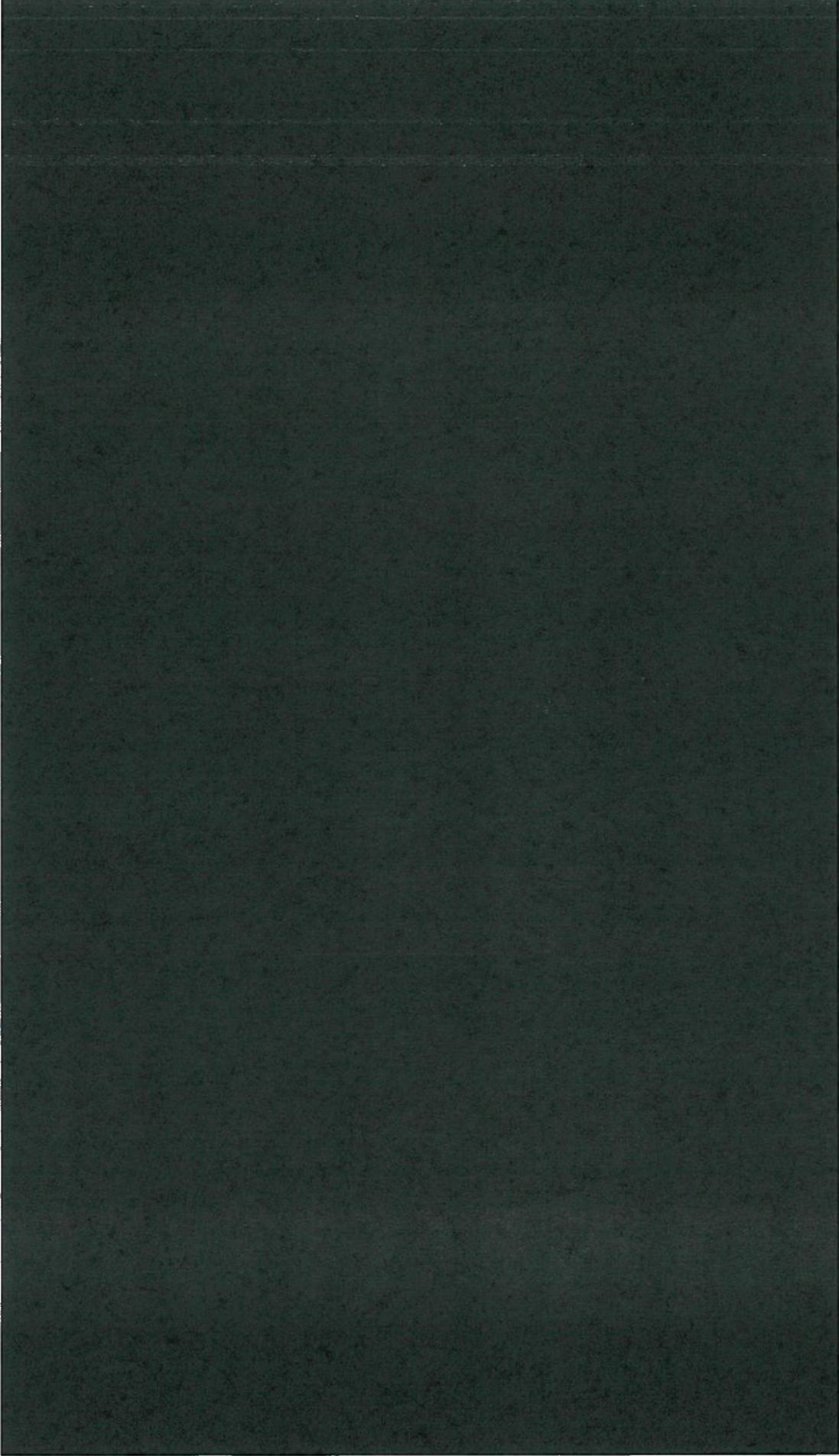


Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



APPENDIX A - New Connection Lifecycle



APPENDIX B - Glossary

This section describes key terms and acronyms used in this document.

Source: Energy Queensland internal sourcing

AEMO Retail Electricity Market Procedures – Glossary and Framework v2.1 December 2017

Term	Definition
ACS	Alternative Control Services
AEMO	Australian Energy Market Operator
B2B	Business-to-Business: A generic term used to refer to certain business-to-business interactions between Participants through the B2B e-hub
BAU	Business as Usual
CapEx	Capital Expenditure
CCT	The Energy Queensland Contact Centre Technology solution comprising IVR and telephony
CIS	Customer Information System
DNSP	Distribution Network Service Provider (i.e. the Energex and Ergon Energy distribution businesses)
EENSP	Exempt Embedded Network Service Provider. Referred to as an Embedded Network Operator by the AER. For the purposes of the Retail Electricity Market Procedures, references to an EENSP can be taken to mean the Embedded Network Operator.
ELT	Energy Queensland's Executive Leadership Team
ETL	Extract Transform Load (data migration and integration technology)
FFA	The Energy Queensland Field Force Automation solution(s). Includes work schedule/despatch and mobile information management
FRC	Full Retail Contestability
FRMP	Financially Responsible Market Participant, usually a Retailer, Generator, Market Customer or an MSGA, identified as such in respect of a connection point in MSATS
GSL	Guaranteed Service Levels
ICT	Information Communication Technology
IVR	Interactive Voice Response
Life Support	A situation where an End User relies on electricity for the operation of 'life support equipment'
LNSP	In the context of a Network Service Provider's distribution network: Local Network Service Provider In relation to a child connection point: EENSP. For the purposes of the Metrology Procedure: If there is more than one Local Network Service Provider for a local area, a reference to the LNSP in respect of a metering installation or connection point is a reference to the LNSP that holds a licence in respect of the network to which that metering installation or connection point is connected
NBM	Network Billing Management
NECF	National Energy Customer Framework

Preliminary Gate 2 Business Case

ID09 SI Portal Consolidation & Replacement



Term	Definition
NEM	National Electricity Market
NER	The National Electricity Rules made under Part 7 of the National Electricity Law
NMI	National Metering Identifier
NMI Address	The physical location of the connection point
NPV	Net Present Value
OpEx	Operating Expenditure
Participant	An organisation with a Participant ID to sign into MSATS
RoLR	Retailer of Last Resort
SCS	Standard Control Services
Service Order	A B2B request to perform specified work
WACC	Weighted Average Cost of Capital

